A partner to the Mayor of London

McDonald's response to the Draft London Plan



Table of Contents

Our o	offer to the Mayor of London	1
Schoo	ol proximity policy	3
1.	Introduction	3
2.	The contribution of McDonald's UK to London	5
3.	The 400m exclusion zone is inconsistent with National Policy	15
4.	The policy is inconsistent, discriminatory and disproportionate	19
5.	The policy is not justified because of a lack of evidence base	21
6.	Similar policies have been found unsound when promoted in other plans	23
7.	Alternative approaches	24
8	Conclusions	25
Additi	ional policy areas	27
9. F	Policy GG1: Building strong and inclusive communities	27
10.	Policy GG3: Creating a healthy city	29
11.	Policy GG6: Increasing efficiency and resilience	31
12.	Policy SD4: The Central Activities Zone / Policy SD6: Town centres	33
13.	Policy SD9: Town centres: Local partnerships and implementation	35
14.	Policy D12: Agent of Change	37
15.	Policy D13: Noise	38
16.	Policy S6: Public toilets	39
17.	Policy HC6: Supporting the night-time economy	40
18.	Policy SI7: Reducing waste and supporting the circular economy	42
19.	Policy T7: Freight and servicing	44
20.	Smarter freight	45
App	pendix 1 – Alternative policy wording	46
App	pendix 2 - Greater London school proximity plan	48
App	pendix 3 - Food in the school fringe tends to be purchased in non-A5 properties	49
Δnr	nendiy 5	50



Our offer to the Mayor of London

McDonald's welcomes the opportunity to respond to the Draft London Plan.

We have played a proud part in London's history since 1974 when we opened our first UK restaurant in Woolwich, and our UK headquarters in Hampstead in the same year (relocating to Finchley in 1978). Nearly half a century later there are 183 McDonald's restaurants in London, directly employing over 15,000 people, and contributing £540 million in revenue to the city's economy.

As the city has grown and changed, so have we. Our continued growth and success in the UK is inextricably linked to London's. Our longevity as a London business means we share many of the policy aspirations of the Mayor and our scale can help make a positive impact on a range of London-wide issues, from access to sport to waste reduction.

In responding to this consultation, we do not just want to provide a view on specific policies we either oppose or support. We want to demonstrate how we can work in partnership with the Mayor, the GLA and London councils to ensure the city's continued success.

We are ready to work as a partner with the Mayor of London and would be keen to collaborate with you on various initiatives, from the Childhood Obesity Taskforce to the Skills Taskforce. However, there is one area of the London Plan in particular which we feel would benefit from fresh consideration.

School proximity

McDonald's shares the Mayor's ambition to reduce childhood obesity in the capital.

There are few restaurants operating in London who can claim to have made so many positive changes to support healthier lifestyles. We believe that the lessons we have learned in making these changes can be used to support a capital-wide drive to reduce obesity.

We have a strong track record of using our expertise in product reformulation, marketing and in supporting community and sporting activities to encourage our customers to make healthier choices – and would be delighted to partner with you to deliver your ambitions.

However, we are concerned that in one area the Mayor, and other public authorities, are rushing to introduce a policy that while well-intentioned, is imprecise, unproven and could potentially be having perverse impacts.

The school proximity policy is a sweeping policy designed to address a complex issue – and which is currently unproven. It is clearly aimed at less responsible businesses than McDonald's – those which pay little regard to promoting healthy or more balanced options – but it would still capture our restaurants as well. This would then reduce the positive impacts McDonald's brings to local communities – jobs and career development, vibrant high streets and community investment – and act as a disincentive to other A5 premises adopting healthier menu options.



We also believe that this policy is currently unproven and the Mayor should not rush to adopt a London-wide school proximity policy before its impacts have been fully investigated.

A review of publicly available public health data shows that, where they have been introduced, school proximity policies have not delivered noticeable improvements to childhood obesity rates.

For example, looking at Public Health England data for the London Borough of Waltham Forest (which was one of the first to introduce a proximity policy in 2008), there has been no discernible impact on childhood obesity rates – with these actually worsening in recent years.

There is a risk that the policy is actually having unintended consequences – pushing young people to buy more sugary snacks from supermarkets as opposed to from takeaways. We believe this warrants investigating and are keen to partner with a number of local authorities to fund a study into young people's snack choices and to determine the best measures to effectively intervene to reduce childhood obesity.

We also recognise that part of the original intent behind the policy was to reduce the number of hot food takeaway premises in urban and suburban centres. We believe this is too sweeping. Unlike many other A5 premises, McDonald's is a major local employer and one of the few global corporations that continues to anchor itself in urban and suburban town centres. We take our responsibilities to litter, anti-social behaviour, noise and hygiene very seriously and believe our presence on a high street contributes to the vibrancy and vitality of London's town centres.

Ultimately school proximity policies duck the big challenge and just try to push perceived problem restaurants away from schools.

The more challenging – but ultimately more effective – goal should be to improve those examples of bad takeaways by helping them to promote healthier options and explore reformulation to reduce unwanted salt and sugar. Nobody has been as successful at this as McDonald's and we would be delighted to share our experiences to help other takeaways achieve our standards.

Our following response includes our substantive comments on the school proximity policy, along with our recommendations to improve it, alongside a number of additional policy areas where we believe that our business can partner with the Mayor to deliver real benefits to London.

McDonald's looks forward to continuing to play its part to help shape this great city.



Paul Pomroy Chief Executive Officer, McDonald's UK and Ireland



School proximity policy

Objection to Policy E9 parts C and D and Supporting text at paragraphs 6.9.5 to 6.9.9

1. Introduction

- 1.1 We have considered policy E9 Retail, markets and hot food takeaways and its supporting text with regard to the principles set out within the Framework. McDonald's fully supports the policy aim of promoting healthier living and tackling obesity. However, the proposed policy approach is not a sound or evidence based way of achieving this policy aim in fact it has been found to be unsound by several planning inspectors. It is too prescriptive and prevents local planning authorities from pursuing more positive policy options. In the one London local authority planning area where such a policy has been in place for nearly a decade (the London Borough of Waltham Forest), its application has proven ineffective in tackling obesity.
- 1.2 Within these broad points we have the following policy objections:
 - a. The 400m exclusion zone is inconsistent with national planning policy.
 - b. The policy is inconsistent, discriminatory and disproportionate.
 - c. The 400m exclusion zone is not justified by evidence.
 - d. Examinations of other plans have found similar policy approaches to be unsound.
 - e. There are better, more positive policy options available that comply with national policy.
- 1.3 In summary, McDonald's considers that there is no sound justification for a policy such as E9 which imposes a blanket ban on restaurants that include an element of A5 use within 400 m (or any other distance) from schools. Policy E9 D should therefore be deleted from the plan.
- 1.4 However, as stated above, McDonald's supports the underlying aim of promoting healthier living and tackling obesity. It acknowledges that planning can have a role to play in furthering these objectives. McDonald's would therefore welcome and support proposals for a London wide study of the causes of obesity and their relationship with development proposals, including examination of how new development can best support healthy lifestyles and the tackling of obesity. When a cogent evidence base has been assembled, this can then inform an appropriate policy response. That time has not yet been reached.



- 1.5 In the alternative, McDonald's proposes alternative policy wording which would secure effective control over new development in a way that distinguishes clearly between development which supports those objectives and development which does not. This alternative policy wording also leaves some discretion to local planning authorities to determine what kind of policy is best for their local circumstances. In this way the strategic role of the London Plan is more effectively and positively achieved.
- 1.6 The alternative policy wording is set out in appendix 1.
- 1.7 A summary of technical issues concerning obesity and health is contained in a freestanding appendix. Given the lack of any clear agreement between experts on the indices of obesity or poor health, this evidence is a necessary part of this objection by way of background.



2. The contribution of McDonald's UK to London

2.1.1 This section of the objection sets out some background context relating to McDonald's own business, its contribution to London, and information on the nutritional value and healthy options of the food that it offers in its restaurants. This evidence is relevant to understanding the adverse and unjustified impacts of the blanket approach proposed under policy E9.

Economic and environmental benefits

2.2

London represents an important part of the McDonald's story. We opened our first UK restaurant in Woolwich in 1974. The store continues to operate today and it was also our 3,000th store across the world.

- 2.3 Today we have 183 restaurants across London, with a presence in every Borough, and are proud to be responsible neighbours in all of these communities.
- 2.4 In London we employ 15,000 people across 183 restaurants. In 2016, we added £540 million in revenue to the Greater London economy.
- 2.5 82% of our restaurants in London are owned and operated by 24 franchisees local entrepreneurs with the remainder operated by the corporate group (McOpCo).
- 2.6 Our business and its franchisees have become important members of communities in London: investing in skills and developing our people, supporting local causes and getting kids into football.
- 2.7 Nationally, the company operates from over 1,250 restaurants and employs just over 115,000 people in the UK. Over 80% of restaurants are operated as local businesses by franchisees.
- 2.8 McDonald's is one of few global businesses that continues to anchor itself in high streets and town centres across London. Not just serving the general public but creating jobs and seeking to improve the communities around us.
- 2.9 All of our restaurants conduct litter picks covering an area of at least 100 metres around the site, at least three times a day, picking up all litter, not just McDonald's packaging. A number of our London restaurants exceed this requirement, both in terms of distance covered and the frequency of litter patrols while those stores that operate with overnight hours add an additional litter patrol, taking this total up to at least four a day.



- 2.10 McDonald's is a founding member of the anti-littering campaign, Love Where You Live. As part of this, our restaurants regularly organise local community litter picks. The campaign has grown and in 2017, 430 events took place across the UK with around 10,000 volunteers involved. Since the campaign started, 2,600 events have taken place with around 80,000 volunteers involved.
- 2.11 McDonald's restaurants are operated sustainably. For example our non-franchised restaurants use 100% renewable energy, combining wind and solar and use 100% LED lighting which means we use 50% less energy than fluorescent lighting. All of our used cooking oil is converted into biodiesel for use by our delivery lorries. Our entire fleet of lorries runs on biodiesel, 40% of which comes from our cooking oil. This creates over 7,500 tonnes fewer CO2 emissions than ultra-low sulphur diesel.
- 2.12 All new McDonald's restaurants in London are fully accessible and we are working toward delivering this same standard for all existing restaurants.
- 2.13 Our restaurants provide a safe, warm and brightly lit space for people, especially those who may feel vulnerable or threatened waiting for a taxi or outside. In the immediate aftermath of recent terrorist incidents in the capital, our restaurants that were open at the time, or kept open, acted as points of refuge for members of the public and as a support base for the emergency services.
- 2.14 Many of our toilets are open to all members of the public. We are one of few night time premises that offer this service and, given the fact we are located in some of the busiest parts of the city, we are helping to keep London clean.

Nutritional value of food and healthy options

- 2.15 McDonald's offers a wide range of different food at its restaurants.
- 2.16 Nutritional information is easy to access and made available online, and at the point of sale on advertising boards, as well as in tray inserts. Information is given on calorie content and key nutritional aspects such as salt, fat and sugar content. This enables an individual is able to identify and purchase food items and combinations that fit in with their individualised calorie or nutritional requirements.
- 2.17 The menu offer includes a range of lower calorie options, some of which are set out in the tables below.
- 2.18 The restaurants now suggest meal bundles to assist customers in making informed, healthier choices. McDonald's have suggested "favourites" meal bundles, across the breakfast and main menu that enable the choice of low calorie options to be made even more easily. These 3-piece meal combinations will all be under 400kcals on the breakfast menu, and all under 600kcals on the main menu (with many options under



400kcals on the main menu also), and all individual items on these menu bundles with be either green (low) or amber (medium) on the Food Standards Agency traffic light system for food labelling.

- 2.19 Examples of low calorie (less than 400kcals) breakfast options (where no single item is red for FSA) include any combination of the following:
 - Egg & Cheese McMuffin / Egg & cheese snack wrap / bagel with Philadelphia / porridge; with fruit bag; and a medium black coffee, or espresso or regular tea or water
- 2.20 Examples of low calorie (less than 600kcals) main menu options (where no single item is red for FSA) are included in the table below. Some 90% of our standard menu is under 500 calories.

Main	Side Options	Drinks Options	Total Calories *varies depending on side & drink choice
The Garlic Mayo Chicken One – grilled wrap	Fruit Bag – Pineapple Stick Carrot Sticks Side Salad with Fajita Dressing	Diet Drink Water Medium Black Coffee Regular Tea	Between 379-390kcal
The Sweet Chilli Chicken One – grilled wrap	Fruit Bag – Pineapple Stick Carrot Sticks Side Salad with Fajita Dressing	Diet Drink Water Regular Tea Medium Black Coffee	Between 374-383kcal
Grilled Chicken & Bacon Salad with Fajita Dressing	Fruit Bag – Pineapple Stick Carrot Sticks	Diet Drink Water Regular Tea Medium Black Coffee	Between 238-247kcal



Chicken McNuggets 6 pieces	Fruit Bag – Pineapple Stick Carrot Sticks Side Salad with Fajita Dressing	Diet Drink Water Regular Tea Medium Black Coffee	Between 293-304kcal
Fillet-O-Fish	Fruit Bag – Pineapple Stick Carrot Sticks Side Salad with Fajita Dressing	Diet Drink Water Regular Tea Medium Black Coffee	Between 363-374kcal
Crispy Chicken Salad with Fajita Dressing	Fruit Bag – Pineapple Stick Carrot Sticks	Diet Drink Water Regular Tea Medium Black Coffee	Between 320-329kcal

2.21 Those specifically wanting a meal low in either fat, salt, or sugar, can tailor their choices accordingly. Any combination of menu items sold at McDonald's can be eaten as part of a calorie controlled nutritionally balanced diet. Customers alternatively eat anything from the menu allowing for this within their overall daily, or weekly nutritional requirements.

Quality of ingredients and cooking methods

2.22 We are always transparent about both our ingredients and our processes and we strive to achieve quality. Our chicken nuggets are made from 100% chicken breast meat, our burgers are made from whole cuts of British and Irish beef. Our coffee is fair trade and our milk is organic. We want our customers to be assured about what they are consuming. The 'Good to Know' section on our website - https://www.mcdonalds.com/gb/en-gb/good-to-know/about-our-food.html - provides a range of information about our processes and where our food is sourced from.



Menu improvement and reformulation

- 2.23 McDonald's is actively and continuously engaged in menu reformulation to give customers a range of healthier options. Louise Hickmott, Head of Nutrition, at McDonald's UK, has provided a letter giving examples of the steps that have been taken in recent years (see appendix 2). The information is summarised below.
- 2.24 In recent years McDonald's has made great efforts to reduce fat, salt and sugar content across their menu.
 - 89% of their core food and drink menu now contains less than 500 kcals.
 - Supersize options were removed from their menu in 2004;
 - 72% of the Happy Meal menus are classified as not high in fat, salt or sugar according to the Government's nutrient profile model;
 - Since October 2015, 50% of the options on the drinks fountain have been no added sugar (Diet Coke, Coke Zero and Sprite Z);
 - Recent years have seen the introduction of new items, offering more choice that has included porridge, salads, grilled chicken wraps, carrot sticks, fruit bags including apple and grape, pineapple sticks, and melon chunks, as well as orange juice, mineral water and organic semi-skimmed milk;
 - Customers can swap fries for fruit bags, carrot sticks or shake salad on the main menu, or the hashbrown for a fruit bag or carrot sticks on the breakfast menu, at no additional cost;
 - In 2014, McDonald's introduced "Free Fruit Fridays" resulting in 3.7 million portions of fruit being handed out. Since then, discounted fruit is now available with every Happy Meal.

Fat

- 2.25 A recent meta-analysis and systematic review of 72 studies (45 cohort studies and 27 controlled trials) demonstrated that with the exception of Trans Fatty Acids (TFA), which are associated with increased coronary disease risk, there was no evidence to suggest that saturated fat increases the risk of coronary disease, or that polyunsaturated fats have a cardio-protective effect, which is in contrast to current dietary recommendations (Chowdrey et al, 2014).
- 2.26 However, UK guidelines currently remain unchanged; men should consume no more than 30g of saturated fat per day, and women no more than 20g per day (NHS Choices, 2013). It should be remembered that all fats are calorie dense (9kcal/g) and that eating too much of it will increase the likelihood of weight gain and therefore obesity, indirectly increasing the risk of coronary heart disease, among other co-morbidities.
- 2.27 What have McDonald's done?
 - Reduced the saturated fat content of the cooking oil by 83%;



- Signed up to the Trans Fats pledge as part of the Government's "Responsibility Deal";
- The cooking oil has been formulated to form a blend of rapeseed and sunflower oils to reduce levels of TFA to the lowest level possible;
- They have completely removed hydrogenated fats from the vegetable oils;
- Reduced the total fat in the milkshakes by 32% per serving since 2010;
- Organic semi-skimmed milk is used in tea/coffee beverages and in Happy Meal milk bottles, with lower saturated fat levels compared with full fat variants.

Sugar

- 2.28 Dietary carbohydrates include sugars, starches and fibre, and each has approximately 4kcals/g.
- 2.29 The Scientific Advisory Commission on Nutrition (SACN) currently recommends that approximately 50% of total dietary energy intake should be from carbohydrates (SACN Report, 2015). In 2015 SACN recommended that the dietary reference value for fibre intake in adults be increased to 30g/day (proportionally lower in children) and that the average intake of "free sugars" (what used to be referred to as non-milk extrinsic sugars) should not exceed 5% of total dietary energy, which was in keeping with the World Health Organisation (WHO) recommendations.
- 2.30 Current average intake of free sugars far exceeds current recommendations, and excess intake is associated with dental issues and excess calorie intake which can lead to weight gain and obesity.
- 2.31 Over the last 10 years our reformulation work has resulted in 787 tonnes less sugar across our menu in 2017 versus 2007. What have McDonald's done?
 - Reducing the sugar in our promotional buns, this removed 0.6 tonnes of sugar
 - Our Sweet Chilli Sauce has been reformulated to reduce sugar by 14% this equates to 155 tonnes of sugar removed
 - Our Festive Dip has removed 4 tonnes of sugar
 - Our famous McChicken Sandwich Sauce has reduced in sugar 45%
 - Our Tomato Ketchup has reduced in sugar by 20% which equates to 544 tonnes of sugar removed from the system
 - Our Chucky Salsa has reduced in sugar by 28%
 - Since 2016 we have reduced the sugar content of Fanta by 54%
 - The Toffee Syrup in our Toffee Latte has been reformulated to remove 20% of the sugar



 We have reformulated our Frozen Strawberry Lemonade this has led to 8% sugar reduction per drink

Salt

- 2.32 A number of health-related conditions are caused by, or exacerbated by, a high salt diet. The strongest evidence links high salt intake to hypertension, stroke and heart disease, although it is also linked with kidney disease, obesity and stomach cancer (Action on Salt website).
- 2.33 Salt is often added to food for either taste or as a preservative, and in small quantities it can be useful. Adults in the UK are advised not to exceed 6g of salt per day, but the average intake at a population level is consistently higher than this.
- 2.34 Salt does not directly lead to obesity, however it does lead to increased thirst, and not everyone drinks water or calorie-free "diet" beverages. If our thirst increases and leads to increased consumption of calories from extra fluid intake, then this may lead to increased weight and obesity. 31% of fluid drunk by 4-18 year old children is sugary soft drinks (He FJ et al, 2008), which has been shown to be related to childhood obesity (Ludwig DS et al, 2001).

2.35 What have McDonald's done?

- The salt content across the UK menu has been reduced by nearly 35% since 2005;
- Customers can ask for their fries to be unsalted:
- The salt added to a medium fries has been reduced by 17% since 2003;
- The average Happy Meal now contains 19% less salt than in 2006
- Chicken McNuggets contain 52% less salt than in 2003.
- 2.36 The process continues. McDonald's have recently made the following changes to further improve their menu
 - Making water the default drink in the Happy Meals;
 - Making it easier for people to understand the existence of a wide range of under 400 and 600 calorie meal options that are available.

Third party opinions of McDonald's



- 2.37 McDonald's regularly receive supportive comments from independent third parties.
- 2.38 Professor Chris Elliott, of the Department for Environment, Food & Rural Affairs' independent Elliott Review into the integrity and assurance of food supply networks: interim report, December 2013:

"Each supply chain is unique, showing that there is no single approach to assuring supply chain integrity. The review has seen many examples of good industry practice that give cause for optimism. There is not space within this final report to reference all the good industry practices but those that have stood out include McDonald's and Morrisons."

2.39 Jamie Oliver, the TV chef, food writer and campaigner speaking in January 2016 at the Andre Simon Food & Drink Book Awards to the Press Association:

"Everyone always liked to poke at McDonald's. McDonald's has been doing more than most mid and small-sized businesses for the last 10 years. Fact. But no one wants to talk about it. And I don't work for them. I'm just saying they've been doing it - 100% organic milk, free range eggs, looking at their British and Irish beef."

2.40 Raymond Blanc, the TV chef and food writer, speaking in 2014, after having presented McDonald's UK with the Sustainable Restaurant Association's Sustainability Hero award:

"I was amazed. All their eggs are free-range; all their pork is free-range; all their beef is free-range.

"[They show that] the fast-food business could change for the better. They're supporting thousands of British farms, and saving energy and waste by doing so.

"I was as excited as if you had told me there were 20 new three-star Michelin restaurants in London or Manchester."

2.41 Marco Pierre White, TV chef and food writer, speaking in 2007:

"McDonald's offers better food than most restaurants and the general criticism of the company is very unfair.

"Their eggs are free range and the beef is from Ireland, but you never hear about that. You have to look at whether restaurants offer value for money, and they offer excellent value."



These comments represent independent opinions.

Supporting active and healthy lifestyles among employees and local communities

- 2.42 McDonald's is focused on its people and is proud to have been recognised for being a great employer. For example:
 - Great Place to Work 2017 'Best Workplaces' we are ranked 4th on the Great Place to Work 2017 'Best Workplaces' list (large organisation). This is our 11th year on the list.
 - The Sunday Times Best Company to Work for List 2017 we have made The Sunday Times 30 Best Big Companies to Work for list for the seventh consecutive year, achieving 6th position.
 - Workingmums.co.uk Employer Awards 2017- Innovation in Flexible Working - in November 2017, we were awarded the Top Employer for Innovation in Flexible Working by workingmums.co.uk. The judges specifically recognised our approach to Guaranteed Hours contracts.
 - The Times Top 100 Graduate Employers the Times Top 100 Graduate Employers is the definitive annual guide to Britain's most sought after employers of graduates.
 - Investors in People Gold Investors in People accreditation means we join
 a community of over 15,000 organisations across 75 countries worldwide
 and it is recognised as the sign of a great employer.
 - School leavers Top 100 Employees McDonald's UK has been certified as one of Britain's most popular employers for school leavers in 2017, for the third consecutive year. An award voted for by 15-18 year olds in the UK.
- 2.43 In April 2017, McDonald's began to offer employees the choice between flexible or fixed contracts with minimum guaranteed hours. This followed trials in 23 restaurants across the country in a combination of Company owned and franchised restaurants. All of our people have been offered this choice and around 80% of our people have selected to stay on flexible contracts.
- 2.44 Over the past 15 years, McDonald's has been proud partners with the four UK football associations: The English Football Association; The Scottish Football Association; The Football Association of Wales; and The Irish Football Association.
- 2.45 This partnership has seen us support over one million players and volunteers. In London since 2014, more than 1,000 people have attended our Community Football Days and we have distributed 3,328 kits to accredited teams in the Capital. Of the 171 McDonald's restaurants within the M25, approximately 88 are twinned and actively supporting a local football club.



- 2.46 We do this work because increasing standards will ultimately create a better experience for young footballers, leading to increased participation and retention of children and young people in sport.
- 2.47 Our Community Football programme helps to increase participation at all levels. We remain absolutely committed to it and are in the final stages of planning our programme for future years.

Marketing

- 2.48 As a business we are committed to ensuring our marketing will continue to be responsible and will be used as a positive influence to help our customers make more informed choices.
- 2.49 We recognise that marketing has a part to play in influencing customers' choices. We comply, and go beyond, the UK's stringent regulations on marketing to children and use our marketing to help families understand more about the range of food options we offer.
- 2.50 We never market products classified as high in fat, salt or sugar to children in any media channel, at any time of the day. We are committed to ensuring that our marketing is always responsible as well as informative, and that it reinforces positive food messages.
- 2.51 In addition, we go beyond the regulations in a lot of cases. For example, when advertising a Happy Meal, we only ever do so with items such as carrot sticks, a fruit bag, milk or water to ensure we are not marketing HFSS food to children. We have done this voluntarily since 2007.

Summary

- 2.49 In the light of the above it is clear that McDonald's restaurants offer the capital considerable and substantial economic benefits, are supportive of active and healthy lifestyles, and enable customers to make informed, healthy choices from the wide ranging menu options available. It is important that this is acknowledged, given the assumption in the draft policy E9 that all A5 uses should be restricted, and given the policy aim which McDonald's supports of promoting healthier lifestyles and tackling obesity.
- 2.50 We turn now to the main points of objection.



3. The 400m exclusion zone is inconsistent with National Policy

Introduction

- 3.1 This section of the objection considers the proposed policy against national policy. The lack of evidence to support the policy is considered in the next section.
- 3.2 National policy contains no support for a policy approach containing a blanket ban or exclusion zone for A5 (or indeed any other) uses. Such an approach conflicts sharply with central planks of Government policy such as the need to plan positively and support economic development, and in particular the sequential approach that seeks to steer town centre uses which include A5 uses to town centres.
- 3.3 We note that the draft London Plan itself (paragraph 6.9.5) inevitably confirms in bold text that a "diverse range of uses" support the vitality and viability of town centres. This includes A5 uses, yet the policy restricts such uses in these locations.

Practical impacts

3.4 The practical impact of the policy on undermining the sequential approach and driving development away from town centres – which is where it is needed – is graphically shown by Dan Cookson's map of the 400m exclusion zones (published by the BBC - http://www.bbc.co.uk/news/health-42172579) found in appendix 3. This shows that by introducing this policy across Greater London there would be virtually nowhere for a new hot food takeaway to open. The plan shows centred circles at 400m, rather than 400m walking distance proposed by the policy. However, it is a good approximation of the impact of the policy on a strategic, London wide basis. It demonstrates that town centres across London would be subject to the exclusion zone.

The Mayor's policy team do not appear to have fully assessed the potential impact of the policy. It essentially creates a moratorium against A5 uses leaving nowhere reasonable for them to locate. This goes against national planning policy in that it contradicts paragraph 20 of the framework, which states:

To help achieve economic growth, local planning authorities should plan proactively to meet the development need of business and support an economy fit for the 21st century.

3.5 Part D of the policy assumes that there will be areas where A5 uses will be outwith the 400m, however the map referenced above confirms this unlikely.



Conflict with national policy

- 3.6 Restricting both the concentration and the location of new A5 proposals (and the like) within London is not a positive approach to planning. The Framework "foreword" states that sustainable development is about positive growth, making economic; environmental; and social progress, for this and future generations.
- 3.7 The suggested restrictions within policy E9 C & D take an ambiguous view of A5 uses in relation to the proximity to existing and proposed primary and secondary schools. The policy would apply an over-generic approach to restrict development with little sound planning reasoning or planning justification. This is contrary to Paragraph 14 of the Framework that advises authorities to positively seek opportunities to meet development needs of their area.
- 3.8 In addition, this approach is inconsistent with Paragraph 19 and 21 of the Framework. Paragraph19 states:

Planning should operate to encourage and not act as an impediment to sustainable growth. Therefore significant weight should be placed on the need to support economic growth through the planning system.

3.9 Paragraph 21 states:

Investment in business should not be over-burdened by the combined requirements of planning policy expectations.

3.10 As explained later in this objection, there is a lack of evidence to demonstrate the link between fast food, school proximity and obesity. The need for evidence is emphasised in paragraph 158 of the Framework that states that each local plan should be based on adequate, up-to-date and relevant evidence. Neither the policy nor the supporting text address this point. Policy needs to be based on evidence.

3.11 Paragraph 23 states:

Planning Policies should be positive, promote competitive town centre environments and set out policies for the management and growth of centres over the plan period. In drawing up Local Plans, local planning authorities should;

- Recognise town centres as the heart of their communities and pursue policies to support their viability and vitality;
- Promote competitive town centres that provide customer choice and a diverse retail offer and which reflect the individuality of town centres;



- Retain and enhance existing markets and, where appropriate, re-introduce or create new ones, ensuring that markets remain attractive and competitive;
- Allocate a range of suitable sites to meet the scale and type of retail, development needed in town centres. It is important that needs for retail, leisure, office and other main town centre uses are met in full and are not compromised by limited site availability. Local planning authorities should therefore undertake an assessment of the need to expand town centres to ensure a sufficient supply of suitable sites;
- Where town centres are in decline, local planning authorities should plan positively for their future to encourage economic activity.
- 3.12 The policy is likely to be very damaging to London's economy due to the fact that it is restricting hot food takeaways to such an extreme level without any regard to the local area or the economy.
- 3.13 There is also conflict with the sequential test requirements, which has its own locational requirements. Paragraph 24 of the Framework is clear in its expectation that an up to date local plan with adopt the sequential approach, and that local authorities should "require" applications for main town centre uses to locate in town centres. The sequential approach would be seriously undermined by the approach proposed in the London Plan.
- 3.14 The Framework cannot be interpreted to provide generic restrictions on a particular use class. There is no basis for such a blanket approach in the Framework or Planning Practice Guidance. In fact, the Planning Practice Guidance emphasises that planning authorities should look at the specifics of a particular proposal and seek to promote opportunity rather than impose blanket restrictions on particular kinds of development. In the section on "Health and Wellbeing":
- 3.15 Paragraph: 002 (Reference ID: 53-002-20140306) states that in making plans local planning authorities should ensure that:
 - "opportunities for healthy lifestyles have been considered (eg planning for an environment that supports people of all ages in making healthy choices, helps to promote active travel and physical activity, and promotes access to healthier food, high quality open spaces, green infrastructure and opportunities for play, sport and recreation);"
- 3.16 Paragraph: 006 (Reference ID: 53-006-20170728) says that a range of criteria should be taken into account, including not just proximity to schools but also wider impacts. It does not support a blanket exclusion zone. Importantly, the criteria listed are introduced by the earlier text which states that "Local planning authorities can have a role in enabling a healthier environment by supporting opportunities for communities to access a wide



range of healthier food production and consumption choices."

- 3.17 Paragraph: 004 (Reference ID: 53-004-20140306) advises that a Health Impact Assessment should be considered in planning decision making, and that the scope for planning conditions and a section 106 obligation to address issues should also be taken into account.
- 3.18 The above guidance serves to emphasise why it is important to look at particular proposals as a whole, rather than adopting a blunt approach that treats all proposals that include an A5 use as being the same.
- 3.19 It should be noted that the objector's alternative policy would not result in any inevitable conflict with the sequential approach. In addition, by setting criteria and requiring a health impact assessment, it would encourage more healthy practices among food retailers. This would satisfy the policy aim for positive planning, and the policy aim of positively supporting healthier development and healthier life styles.



4. The policy is inconsistent, discriminatory and disproportionate

- 4.1 The policy aims to address obesity and unhealthy eating but instead simply restricts new development that comprises an element of A5 use. Yet A1 retail outlets and A3 food and drink uses can also sell food that is high in calories, fat, salt and sugar, and low in fibre, fruit and vegetables, and hot food from an A3 unit can be delivered to a wide range of locations, including schools. This means that the policy takes an inconsistent approach towards new development that sells food, and discriminates against operations with an A5 use. It also means that the policy has a disproportionate effect on operations with an A5 use.
- 4.2 The test of soundness requires that the policy approach is "justified", which in turn means that it should be the most appropriate strategy when considered against the reasonable alternatives, and based on proportionate evidence (paragraph 182 of the Framework).
- 4.3 Given the objectives of the policy, it ought to apply equally to all relevant food retailers.
- 4.4 The table below shows the kind of high calorie, low nutritional value food that can be purchased from a typical A1 high street retailer at relatively low cost. It is contrasted with the kind of purchase that could be made at a McDonald's. The evidence provided at Appendix 4 confirms that 70% of purchases by students in the school fringe are purchased in non-A5 shops.1

Company	Snack or meal	Salt	Fat (g)	Calories	Price
		(g)		(kcal)	(£)
McDonald's	Apple and Grape fruit bag	0.0	0.1	46	49p
McDonald's	Garlic Mayo chicken wrap	1.3	11.0	345	2.99
Greggs	Sausage roll	1.6	22.0	317	90p
Greggs	Cheese and Onion bake	1.6	30.0	436	1.35
Costa Coffee	Nutty flapjack	0.1	23.2	425	1.70
Costa Coffee	Ham and Cheese panini	2.5	13.5	427	3.95

4.5 If the policy is to be based on Use Classes, then the proposed policy should place restrictions on other use classes in addition to class A5. In fact, by restricting A5 uses only, the policy would encourage food purchases at other locations.

¹ The School Fringe: What Pupils Buy and Eat From Shops Surrounding Secondary Schools, July 2008, Sarah Sinclair and Professor J T Winkler, Nutrition Policy Unit of London Metropolitan University



- 4.6 Finally, it is important that for the majority of days in the year (weekends and school holidays combined) schools are not open at all. Research by Professor Peter Dolton of Royal Holloway College states that "At least 50% of the days in a year kids don't go to school if we count weekends and holidays and absence. They are only there for 6 hours and all but 1 are lessons. So only around 2-3% of the time can [children] get fast food at school."2
- 4.7 For the minority of the year when schools are open, it is important to recognise that many schools have rules preventing children from leaving the school grounds during the school day, and in any event proximity to schools has no conceivable relevance outside of the particular times when children are travelling to or from school in circumstances where their route takes them past the development proposal.
- 4.8 The policy's blanket approach fails to acknowledge that the opportunity for children to access A5 development as part of a school day is extremely limited. The complete ban is wholly disproportionate to the circumstances when the concern underlying the policy might arise. Only limited purchases of food are made at A5 uses on journeys to and from school. Further details are set out in Appendix 5.
- 4.9 Our alternative policy approach (appendix 1) would address this point by focusing on the actual impacts of the proposal rather than the use class.

² Peter Dolton, Royal Holloway College, University of London & Centre for Economic Performance, London School of Economics, *Childhood Obesity in the UK: Is Fast Food a Factor?*http://www.made.org.uk/images/uploads/2_Prof_P_Dolton_presentation.ppt
20



5. The policy is not justified because of a lack of evidence base

- 5.1 The test of soundness requires policy to be evidence based. There is no evidence of any causal link between the presence of A5 uses within 400m of schools and increases in obesity or poor health outcomes. In fact, the studies that have considered whether such a causal connection exists have found none.
- 5.2 Public Health England (PHE), which is part of the Department of Health and Social Case, expressly accept that the argument for the value of restricting the growth in fast food outlets is only "theoretical" based on the "unavoidable lack of evidence that can demonstrate a causal link between actions and outcomes." ³
- 5.3 A systematic review of the existing evidence base by Oxford University (December 2013), funded by the NHS and the British Heart Foundation 'did not find strong evidence at this time to justify policies related to regulating the food environments around schools.' It instead highlighted the need to 'develop a higher quality evidence base'. {reference needed}
- 5.4 The range of US and UK studies used to support many beliefs about obesity, including the belief that the availability of fast food outlets increased obesity, was comprehensively reviewed in papers co-written by 19 leading scientists in the field of nutrition, public health, obesity and medicine. Their paper "Weighing the Evidence of Common Beliefs in Obesity Research" (published in the Critical Review of Food, Science and Nutrition (Crit Rev Food Sci Nutr. 2015 December 6; 55(14) 2014-2053) found that the current scientific evidence did not support the contention that the lack of fresh food outlets or the increased number of takeaway outlets caused increase obesity (see pp16-17 of the report).
- 5.5 The draft policy refers to the views of "a wide range of health experts" but there appears to have been no critical assessment of what these views are based on and whether the underlying evidence supports those views or the proposed policy approach. It does not.
- 5.6 In this context, it is important to consider the evidence from Waltham Forest which introduced a school proximity policy in 2008 about a decade ago. Over that period, the Public Health England data for the Borough shows that there has been no discernible impact on childhood obesity rates with these actually worsening in recent

³ Public Health England & LGA, *Healthy people, healthy places briefing: Obesity and the environment: regulating the growth of fast food outlets,* page 5, November 2013

⁴ J Williams, P Scarborough, A Matthews, G Cowburn, C Foster, N Roberts and M Rayner, Nuffield Department of Population Health, University of Oxford, page 13, 11th December 2013. *A systematic review of the influence of the retail food environment around schools on obesity-related outcomes.*



- years. The borough's Health Profile for 2017 records childhood obesity (year 6) at 26.1% up from 20.3% in 2012, the year London hosted the Olympic Games.
- 5.7 While it is accepted that the causes of obesity are complex, it is clear that the exclusion zone policy had no discernible effect in Waltham Forest. It is clear that more research and investigation is needed before such a policy approach can be justified by evidence.



6. Similar policies have been found unsound when promoted in other plans

- 6.1 The lack of evidence between proximity of takeaways to schools and its impact on obesity has been confirmed in a number of planning decisions.
- 6.2 In South Ribble the Planning Inspectorate raised concerns about a similar 400m school proximity restriction on fast food, stating 'the evidence base does not adequately justify the need for such a policy', and due to the lack of information, it is impossible to 'assess their likely impact on the town, district or local centres'. 5
- 6.3 Similarly, research by Brighton & Hove concluded that 'the greatest influence over whether students choose to access unhealthy food is the policy of the individual schools regarding allowing students to leave school premises during the day'.6
- 6.4 The recent Inspectors response to the London Borough of Croydon (January 2018) regarding a similar prohibition on A5 uses, (where a similar campaign to persuade takeaway proprietors to adopt healthy food options existed) confirmed that the councils own 'healthy' plans would be stymied by the proposed policy, as would purveyors of less healthy food. The policy failed to distinguish between healthy and unhealthy takeaway food, and "confounds its own efforts to improve healthiness of the food provided by takeaway outlets" and failed to "address the demand for the provision of convenience food". The Inspector concluded that because the reasons for the policy do not withstand scrutiny, they must be regarded as unsound.
- 6.5 The proposed policy E9, with its blanket prohibition on A5 uses is similarly unsound.

⁵ Letter to South Ribble Borough Council, 29th April 2013, from Susan Heywood, Senior Housing & Planning Inspector, The Planning Inspectorate

⁶ Brighton & Hove City Council & NHS Sussex, Hot-food takeaways near schools; An impact study on takeaways near secondary schools in Brighton and Hove, page 30, September 2011 23



7. Alternative approaches

- 7.1 McDonald's considers that there is no sound justification for a policy such as E9 which imposes a blanket ban on restaurants that include an element of A5 use within a particular distance from schools. Policy E9 D should therefore be deleted from the plan.
- 7.2 McDonald's would welcome and support proposals for a London wide study of the causes of obesity and their relationship with development proposals, including examination of how new development can best support healthy lifestyles and the tackling of obesity. When a cogent evidence base has been assembled, this can then inform an appropriate policy response. That time has not yet been reached.
- 7.3 In the alternative, the policy should be redrafted to allow Boroughs the discretion to introduce criteria based policies that assess the actual impacts of proposals in the particular circumstances of each case. This alternative approach would ensure that development plan policies adopted at the Borough level were evidence based and that planning applications were only allowed or only refused where the evidence justified it. It would result in a more consistent and fairer policy approach. It would also ensure that the underlying aims of promoting healthier living and tackling obesity were met in a positive way without undermining the social, economic and environmental benefits that some development involving A5 uses could bring.
- 7.4 A proposed redrafted policy is attached in appendix 1, and it is self-explanatory. By setting the framework for a criteria based approach, requiring evidence about particular proposals, and adopting the Planning Practice Guidance advice on the use of health impact assessments, the alternative policy is undoubtedly a sound approach.
- 7.5 If such a policy were not considered appropriate, a more limited re-writing of the draft policy so as to require Boroughs to adopt criteria based policies based on evidence could be used, in preference to the current draft proposal for a blanket ban.



8 Conclusions

- 8.1 McDonald's supports the policy objective of promoting healthier lifestyles and tackling obesity. It does not consider that the proposed policy E9 is a sound way of achieving those objectives.8.2 The underlying assumption in the policy is that all A5 uses (and any restaurants with an element of A5 use) are inherently harmful to health. In fact, this is not supported by evidence. McDonald's own business is an example of a restaurant operation which includes A5 use but which offers healthy meal options, transparent nutritional information to allow healthy choices, and quality food and food preparation. The business itself supports healthy life styles through the support given to its staff and support given to football in the communities which the restaurants serve.
- 8.2 In addition, the policy fails to acknowledge the wider benefits that restaurants can have, including benefits relevant to community health and wellbeing. McDonald's own business is an example of a restaurant operation that supports sustainable development through the use of renewable energy, the promotion of recycling, the use of energy and water saving devices. The economic benefits of its restaurants in supporting town centres and providing employment opportunities and training are substantial, and important given that improved economic circumstances can support improved health.
- 8.3 The policy fails to acknowledge that food choices which are high in calories and low in nutritional value are made at premises trading with A1 and A3 consents, and can be delivered from the latter. The policy makes no attempt to control these uses.
- 8.4 For the reasons given in this objection the proposed policy is very clearly inconsistent with government policy on positive planning, on supporting economic development and the needs of businesses, on supporting town centres, and on the sequential approach. There is no justification in national policy for a blanket exclusion zone based applied to A5 uses. The effect of the policy had it existed in the past would have been to exclude restaurants such as McDonald's from major commercial and tourist areas such as Oxford Street and Westfield shopping centres.
- 8.5 For the reasons given in this objection the proposed policy lacks a credible evidence base, and similar policies have been found to be unsound by inspectors who have examined other plans. In the one London Borough that has had a similar policy for about a decade (LB Waltham Forest), it has had no discernible effect on obesity levels, which have in fact increased.



- 8.6 McDonald's would welcome and support proposals for a London wide study of the causes of obesity and their relationship with development proposals, including examination of how new development can best support healthy lifestyles and the tackling of obesity. When a cogent evidence base has been assembled, this can then inform an appropriate policy response. That time has not yet been reached.
- 8.7 In the alternative, it has proposed alternative policy wording that allows Boroughs to adopt criteria based policies that would focus on the actual impacts of proposals rather than making unjustified assumptions and imposing blanket controls in relation to a particular Use Class. Such a policy would be the best and a sound way of achieving the objectives of the London Plan, in the absence of the London wide study which McDonald's would like to see carried out.



Additional policy areas

The following section sets out additional policy areas where McDonald's believes that it can support the Mayor of London to make a positive contribution to the capital.

9. Policy GG1: Building strong and inclusive communities

9.1 We welcome the Mayor's focus on Good Growth. Whether it is improving economic prospects, health outcomes or quality of life, we believe all Londoners should see the benefits of London's continued growth. Just as McDonald's scale can help drive employment and economic growth in London, we want to use our scale for good by contributing to the vitality and vibrancy of town centres and high streets across the Capital.

9.2 Economic opportunity

We directly employ 15,741 people in our London restaurants. While the majority of our employees are aged 16 to 24, our oldest employee is aged 72.

In London, 360 apprentices gained a qualification with us between 2013 and 2016. We currently have 27 working on new Apprenticeship standards with us.

We are also an upwardly mobile organisation. Three members of our UK board - Jason Clark, Gareth Pearson and Jon Betts - started on the restaurant floor. 12 out of our 23 London franchisees started in store.

82% of our restaurants in London are owned and operated by 24 franchisees with the remainder operated by McDonald's corporate group (McOpCo). Our business and its franchisees have become important members of communities in London: investing in skills and developing our people, supporting local causes and getting kids into football.

9.3 Promoting London's town centres

McDonald's is one of few global businesses that continues to anchor itself in high streets and town centres across London. Not just serving the general public but creating jobs and seeking to improve the communities around us.

All of our restaurants conduct litter picks covering an area of at least 100 metres around the site, at least three times a day, picking up all litter, not just McDonald's packaging. A number of our London restaurants exceed this requirement, both in



terms of distance covered and the frequency of litter patrols while those stores that operate with overnight hours add an additional litter patrol, taking this total up to at least four a day.

McDonald's is a founding member of the anti-littering campaign, Love Where You Live. As part of this, our restaurants regularly organise local community litter picks. The campaign has grown and in 2017, 430 events took place across the UK with around 10,000 volunteers involved. Since the campaign started, 2,600 events have taken place with around 80,000 volunteers involved.

9.4 Good quality services and amenities

All new McDonald's restaurants in London are fully accessible and we are working toward delivering this same standard for all existing restaurants.

Our restaurants provide a safe, warm and brightly lit space for people, especially those who may feel vulnerable or threatened waiting for a taxi or outside. In the immediate aftermath of recent terrorist incidents in the capital, our restaurants that were open at the time, or kept open, acted as points of refuge for members of the public and as a support base for the emergency services.

Many of our toilets are open to all members of the public. We are one of few night time premises that offer this service and, given the fact we are located in some of the busiest parts of the city, we are helping to keep London clean.



10. Policy GG3: Creating a healthy city

McDonald's shares the Mayor's ambition to improve health outcomes, and reduce the inequality of health outcomes, in London. We are supportive of Policy GG3 and believe promoting informed choices and physical activity are key to improving health outcomes.

In line with our ambition to support the Mayor's drive to tackle childhood obesity, we would draw attention to the following policy areas.

10.1 Reducing health inequalities and Promoting more active and healthy lifestyles

Over the past 15 years, McDonald's has been proud partners with the four UK football associations: The English Football Association; The Scottish Football Association; The Football Association of Wales; and The Irish Football Association.

This partnership has seen us support over one million players and volunteers. In London since 2014, more than 1,000 people have attended our Community Football Days and we have distributed 3,328 kits to accredited teams in the Capital. Of the 171 McDonald's restaurants within the M25, approximately 88 are twinned and actively supporting a local football club.

We do this work because increasing standards will ultimately create a better experience for young footballers, leading to increased participation and retention of children and young people in sport.

Our Community Football programme helps to increase participation at all levels. We remain absolutely committed to it and are in the final stages of planning our programme for future years.

10.2 Increasing availability of healthier food and restricting unhealthy options

We are a committed to increasing availability of healthier food and have worked hard to improve the nutritional quality of our food.

- Between 2007 and 2015 we have removed 798 tonnes of saturated fat and 377 tonnes of sugar from our menu
- Since 2005, we have reduced the salt content across the menu by nearly 35%
- 90% of our menu items are under 500 calories
- In 2015, we served over 60 million portions of fruit and vegetables



McDonald's has also joined an alliance of the largest out-of-home food and beverage brands in the UK to help tackle sugar reduction and other nutrients of concern. We have committed to achieving Public Health England's sugar reduction target of 20% by 2020.

As well as improving the nutritional quality of our menu, we continue to lead the way in helping our customers make informed choices by working with experts to make to make healthier choices more prominent.

For example, simply by changing the ordering of drinks visible on our touchscreen kiosks, we've seen more people changing to Coke Zero over Coca Cola. We are also seeing significant increases in the number of Fruit Bags being sold in Happy Meals.

For over 30 years we have been providing nutritional information about our products. We were the first restaurant chain in the UK to provide calorie information on our menu boards in every one of our restaurants.

We recently rolled-out our new 'Meals Under' 400kcal and 600kcal bundles. Displayed clearly on our kiosks, our 'Meal Under' bundles bring together a main menu item, a drink and a side for breakfast, lunch or dinner. All achieve amber and green on the Food Standards Agency traffic light system for fat, saturated fat, salt and sugar.

We have a strong track record in reformulation and encouraging consumers to make healthier choices. We believe there are lessons from the changes we have made which can be shared with the wider industry – specifically A5 premises – in London. As outlined above, we would like to work with the Mayor through his Childhood Obesity Taskforce to share our best practice with other A5 premises in London and would like to explore how best to promote and enhance the Mayor's Healthy Catering Commitment across the capital.



11. Policy GG6: Increasing efficiency and resilience

We believe the target for London to become zero carbon by 2050 is ambitious but achievable. We are already working hard to reduce carbon emissions through our physical estate and our supply chain.

11.1 Energy efficiency and low carbon

Our non-franchised restaurants in London use 100% renewable energy – a combination of wind and solar. We have signed long-term agreements with renewable energy operators who will provide much of our annual electricity for the coming decade.

All of our new restaurants are built with energy efficiency in mind and we are proud to champion energy efficiency. This includes using smart technology to control lighting, heating and air conditioning, energy efficient kitchen equipment, and motion-sensitive lighting.

All of our new non-franchised restaurants have 100% LED lighting, which means we use 50% less energy than fluorescent lighting. Over 120,000 LED lights have now been installed across our UK restaurants, right down to the bulbs in the emergency lighting.

All of our new restaurants are also designed to make the most of natural light, utilising 'sun pipes' and carefully designed glazing to assist with internal lighting and heat retention.

We were one of the first restaurant chains to send waste to special facilities where it is converted into energy, providing energy for local farmers.

11.2 Creating a safe and secure environment which is resilient against the impact of emergencies including fire and terrorism

All of our restaurants are designed to ensure full compliance with the fire safety elements of building regulations. This includes the use of fire compartmentation to minimise the spread of smoke or flames and the provision of sufficient, clearly signed emergency exit routes. Each restaurant is fitted throughout with a high specification fire detection and alarm system, and emergency lighting on exit routes. All fire safety equipment is regularly checked and maintained by fire protection specialists and all employees receive fire safety training, with managers receiving additional training. In addition to the usual portable fire extinguishers, we fit automatic fire suppression systems to protect kitchen equipment with increased fire risk, such as deep fat fryers.



McDonald's and its franchisees always seek to work proactively with local police forces as part of our commitment to providing the safest possible environment for customers, staff and others. We aim to take action before incidents happen and hold regular meetings with local police to discuss how best we can achieve this.

StaffSafe systems and/or CCTV are installed at all our restaurants in London. These measures exist in addition to the standards that we must uphold for our restaurants to operate during the day.

We employ Security Industry Authority guards as and when required both for reasons of preventing crime and disorder, and to support the authorities in the event of major incidents. In the immediate aftermath of recent terrorist incidents that have taken place across the capital, our restaurants that were open at the time, or kept open, acted as points of refuge for members of the public and as a support base for the emergency services.

McDonald's has recently compiled extensive, best-practice guidance advising franchisees and business managers on how best to manage anti-social behaviour. The aim of the document is to outline the suite of measures that franchisees can introduce to prevent, deter or address anti-social behaviour. Upon request we also shared this guidance with the Mayor's Office for Policing and Crime.

As well as recommendations to follow when installing CCTV and StaffSafe systems, the guidance provides information on ASB awareness, reporting and tracking incidents and measures for combatting loitering. The document also sets out how restaurants can best work in partnership with the police and other organisations.

Given our scale and capacity for cross-city coordination, this is an area where we believe there is scope for further collaboration with the police, counter terror officials and other local authorities. The absence of alcohol at McDonald's in the UK also means our restaurants are one of the few night time businesses open to all communities in the event of such incidents.



12. Policy SD4: The Central Activities Zone / Policy SD6: Town centres

McDonald's has a large footprint within the Central Activities Zone (CAZ), operating a total of 62 restaurants across the CAZ boroughs.

As with the rest of London our scale in the CAZ is helping to drive employment and economic growth and contributing to the vitality and vibrancy of town centres and high streets in Central London.

12.1 The unique concentration and diversity of cultural, arts, entertainment, night-time economy and tourism functions should be promoted and enhanced.

McDonald's is a long-time supporter of, and one of the largest operators in, London's night time economy within the CAZ. As we set out in our response to the Mayor's Night Time Economy SPG Consultation and the Night Time Commission consultation, we welcome the Mayor's focus on the night time economy since taking office and share his ambition to make London a truly 24-hour city.

We are one of the few operators in the night-time economy who not only do not serve alcohol, but have strict rules about not having open containers in our restaurants. As such, we are an industry leader when it comes to providing inclusive night-time environments and are proud to serve a wide variety of customers.

To help attract a wider range of visitors to the CAZ at night, we believe that there is scope for simplification of the planning and licensing system in respect of applications for alcohol-free attractions.

It is our belief that at present there is a lack of readily available access to convenient, affordable hot food, as well as hot and cold non-alcoholic drinks, before, during or after night shifts. We believe that there are opportunities to address this through the planning and licensing system, and that the planning system is the correct place to deal with food and late-night refreshment applications.

12.2 The attractiveness of the CAZ to residents, visitors and businesses should be enhanced through public realm improvements and the reduction of traffic dominance, as part of the Healthy Streets Approach

Many of our toilets are open to all members of the public. We are also one of few night time premises that offer this service and, given the fact we are located in some of the busiest parts of the city, we are helping to keep London clean.



We believe there are not enough free publicly-accessible toilets in the Central Activities Zone and this has an adverse impact on local communities, impacting the public realm and leading to anti-social behaviour.

We welcome the Draft Plan's proposal to push for more, free publicly-accessible toilets in the city.



13. Policy SD9: Town centres: Local partnerships and implementation

13.1 We welcome the Draft Plan's support for local partnership approaches, community engagement, town centre management, business associations and Business Improvement Districts.

82% of our restaurants in London are owned and operated by 24 franchisees with the remainder operated by McDonald's corporate group (McOpCo). A number of our franchisees, many of whom operate small and medium-size enterprises, actively participate in local BIDs across the city, from Wood Green in the North to Brixton in the South, via Leicester Square and the Heart of London BID.

Three examples of the active role our franchisees play in their communities are set out below.

Bill Perera began his McDonalds career in the restaurant in Catford in 1980 and today is the owner and operator of five McDonald's restaurants across Bexley, Bromley, Sevenoaks and Sidcup. He has always been committed to contributing to the local communities around his restaurants.

Often working closely with local councillors and MPs, Bill's restaurants organise regular litter events, supporting the Keep Britain Tidy 'Love Where You Live' campaign through community events. In addition, the restaurants also sponsor local football teams: Orpington FC and St Mary Cray Athletic FC. Bill's businesses have won many environmental awards and best employer awards including 'Best Green Business' at the 2016 Bromley Business Awards.

Bill was born in Sri Lanka and often revisits the country as well as supporting a local orphanage there. Previously, he has held the position of Head of International Operations for McDonald's, opening restaurants in Sri Lanka, Pakistan and India.

Bill supports Orpington Business Improvement District (BID) and became a Board Director in 2013. He sponsors the Orpington town Christmas tree.

Atul Pathak was born in India and came to the UK soon after graduating. He became a franchisee in 2003 and is now the largest McDonald's franchisee in the UK and owns 27 restaurants in London across 10 boroughs in West and North London.

Atul employs over 2,500 staff and places a strong emphasis on development and training having opened a state-of-the-art training centre, which is also an accredited examination centre. This enables his employees to gain workplace



skills and nationally recognised qualifications that are equivalent to GCSEs and A-levels, including a Level 2 Apprenticeship in Multi-Skilled Hospitality.

Atul's community work extends to supporting a number of youth football teams to nurture local football talent. In addition, he and his staff carry out a number of clean-up campaigns to help enhance the local environment.

He has always sought to give back to the community, working with a number of local community organisations and charities. In the last 10 years, Atul's company along with Atul himself, have raised around £500,000 for various charities. He also voluntarily donates a percentage of his annual sales to charities and in 2013 he trekked across the Sahara Desert for four days, raising over £20,000 in the process.

Atul has also been chairman of the Community Focus Group in Southall from 2006 to 2013. The group, made up of local business owners, community leaders police officers, local councillors and residents, is a forum where community issues and problems are discussed and the solutions prioritised. During his tenure as chairperson, good progress was made across many areas which included reducing drug crime, prostitution and knife crime in Southall.

Claude Abi-Gerges operates 21 restaurants across Westminster, Camden and the City of London. He is a Board Director at the Heart of London BID, and an active member in a number of other BIDs an active member of a number of BIDs across the area, such as the New West End Company, the Fitzrovia Partnership and Camden Town Unlimited. Claude supports local employment initiatives such as Recruit London, and was a founding member of the Young Westminster Foundation.

He works closely with local police, and supports a number of initiatives including Police on Pride Day, taking part in regular crime intelligence meetings and was one of the early adopters of the *Best Bar None* initiative for late night operators within Westminster. He is also a member of the Night Time Economy Strategy Group in Westminster and has also recently been working with St. Mungo's to combat homelessness in Central London.



14. Policy D12: Agent of Change

Our business is dynamic and as more of our restaurants in the capital move to 24/7 operations we are minded of the impact this can have on the communities in which we operate.

We always seek to minimise any impacts caused by a move to overnight operations. Often mitigation measures we introduce to operate at night also bring benefits to communities during the daytime as well. For example, plant noise often needs attenuation to operate over night. By introducing this, we are then able to minimise plant noise during the day as well.

While we tentatively support the Agent of Change principle, McDonald's would be concerned if being labelled an Agent of Change would prompt additional mitigation above and beyond what is already required, as this could act as an obstacle for responsible businesses such as ours to expand and grow.

Furthermore, if Agent of Change has been implemented we believe business should then enjoy a defence against complaints of nuisance. This would require a change to statute and the Environmental Protection Act 1990.



15. Policy D13: Noise

McDonald's frequently carries out Noise Impact Assessments to ensure that nearby residents will not be adversely affected by any of our restaurants' operations. The companies contracted by McDonald's to conduct these assessments are well-established and widely-recognised by local authorities.

If the assessment does show excessive noise levels, we have a number of potential avenues for recourse. One example mitigation measure relating to noise specifically is the installation of specialist acoustic fencing.

Measures designed to address other issues include the installation of specialist extractor fans to minimise odours emanating from restaurants and fencing to minimise light pollution.



16. Policy S6: Public toilets

We believe there are not enough free publicly-accessible toilets in London and this has an adverse impact on local communities, impacting the public realm and leading to anti-social behaviour.

We welcome the Draft Plan's proposal to push for more, free publicly-accessible toilets in the city.

Many of our toilets are open to all members of the public. We are also one of few night time premises that offer this service and, given the fact we are located in some of the busiest parts of the city, we are helping to keep London clean.



17. Policy HC6: Supporting the night-time economy

McDonald's is a long-time supporter of, and one of the largest operators in, London's night time economy. As we set out in our response to the Mayor's Night Time Economy SPG Consultation and the Night Time Commission consultation, we welcome the Mayor's focus on the night time economy since taking office and share his ambition to make London a truly 24-hour city.

We have been encouraged by recent positive developments that have supported the night time economy such as the expansion of the night tube, the creation of the Night Time Commission and the appointment of Amy Lamé as the city's first Night Czar.

Improve inclusive access and safety

McDonald's is one of the few operators in the night-time economy who not only do not serve alcohol, but have strict rules about not having open containers in our restaurants. As such, we are an industry leader when it comes to providing inclusive night-time environments and are proud to serve a wide variety of customers.

To help attract a wider range of visitors to the night time economy, we believe that there is scope for simplification of the planning and licensing system in respect of applications for alcohol-free attractions.

Diversifying the range of evening and night time activities

We are proud to serve London's key sector workers, whose jobs often require them to work irregular hours, including at night. This includes the emergency services, TfL and night shift workers.

By catering to this demographic at a time of day when few others do, McDonald's provides an important service to London's essential service workers.

It is our belief that at present there is a lack of readily available access to convenient, affordable hot food, as well as hot and cold non-alcoholic drinks, before, during or after night shifts. We believe that there are opportunities to address this through the planning and licensing system, and that the planning system is the correct place to deal with food and late-night refreshment applications.

High concentrations of licensed premises

In terms of recommendation B. 4. we believe it is important to recognise the distinct role of late night refreshment outlets in catering to groups beyond those associated with the night-time economy. A large number of our night-time customers' visits are entirely separate from alcohol.





18. Policy SI7: Reducing waste and supporting the circular economy

At McDonald's we recognise we have a responsibility to use our scale for good. A business of our size can make a big difference by making small changes. Protecting and enhancing our environment is one area where we know we can do more.

Waste reduction and the circular economy

Our packaging comes from sustainable sources. We are proud that every piece of our paper or card packaging is verified by the Forest Stewardship Council or the Programme for Endorsement of Forest Certification.

Our cooking oil is converted into biodiesel at a UK plant which runs on the energy generated by our kitchen food waste, like coffee grounds and egg shells. Our entire fleet of lorries runs on biodiesel, 40% of which comes from our cooking oil. This creates over 7,500 tonnes fewer CO2 emissions than ultra-low sulphur diesel.

Currently, 75% of our London restaurants have undergone the significant reimaging programme Experience of the Future. This enhances our dining experience by allowing customers to order using touchscreen kiosks and enjoy our free Wi-Fi. An important benefit of the initiative is that our customers can now choose to remove ingredients prior to sale. This means that rather than disposing of unwanted ingredients after sale, they are not included in the first instance.

Going further

We are committed to reducing our environmental impact and continue to challenge ourselves and our supplier partners to help evolve our thinking. In January 2018, we announced a vision of ensuring all our packaging worldwide will come from sustainable sources by 2025. Nevertheless, we know we can go further in helping our customers to recycle more today. Over the past few years we have invested heavily in introducing new recycling bins in our restaurants to help us achieve our goal of no waste from our restaurants going to landfill by 2020.

In London, over two thirds of our restaurants offer front of house recycling. We also achieved an industry first by developing a backhaul process whereby our coffee cups are recycled by two partners into high end packaging (e.g. Selfridges bags) and furniture. It is also worth noting the vast majority of our consumer packaging is recyclable.

More broadly, our partners and those that make our packaging, like plastic straws, are also working with us to find new and innovative ways of helping us to use less plastic. We have also committed to ensuring none of the waste from our restaurants goes to landfill by 2020.



There has been significant scrutiny of single-use coffee cups and water bottles in recent months. At McDonald's, we have altered our guidance to all restaurants to ensure that any customer that wishes to refill their water bottle or to have a coffee in a reusable coffee cup can do so.



19. Policy T7: Freight and servicing

McDonald's shares the Mayor's ambition to reduce emissions from freight and already has a strong track record in this regard.

- All of our used cooking oil is converted into biodiesel for use by our delivery lorries. For 10 years our entire fleet of lorries has run on biodiesel, 40% of which comes from our cooking oil, creating over 7,500 tonnes fewer CO2 emissions than ultra-low sulphur diesel.
- Our used cooking oil, cardboard and kitchen food waste is collected by the same vehicles which deliver food and packaging to our restaurants. Using delivery vehicles in this way reduces the number of trips we make by 5,000 per year.
- In an example of the circular economy working in action, this cooking oil is converted into biodiesel at a UK plant which runs on the energy generated by our kitchen food waste, like coffee grounds and egg shells.
- Our delivery partner, Martin Brower UK was Highly Commended in both the Low Carbon Vehicle Operator of the Year (sponsored by BAE Systems) and the Noise Abatement Society John Connell Soundscape Award (sponsored by Transport for London).



20. Smarter freight

We are also supportive of a more flexible, smart technology-based approach to road usage in London. We are keen to work with the Mayor on the rescheduling of the city's freight traffic and deliveries away from peak times to ease congestion, reduce pollution and improve air quality across the capital.

We believe that the London Lorry Control Scheme (LLCS) should be reviewed because restricting the journeys of vehicles which weigh over 18 tonnes to certain hours of the day and week is exacerbating air quality problems. Unintended consequences from this policy have meant that many lorries take excessive detours, thus emitting more pollution in the journey process. For example, when McDonald's delivers between Marl Road Wandsworth and Oxford Street, the fastest route is 5.5 miles and should take approximately 20 minutes. However, when applying LLCS regulations, the route is significantly increased to 18.3 miles and takes 51 minutes to complete.

As we upgrade our fleet of 18 tonne vehicles to comply with Euro 6 emission standards, we need to upgrade the weight to 26 tonnes (due to a heavier engine). These new clean vehicles fall out of exemption and are subject to LLCS rules, adding mileage, time and emissions.

A review of the LLCS would also be able to take into account modern, quieter HGV technology which has significantly reduced the noise lorries make. We would welcome the opportunity to work with the Mayor to explore alternatives to the current scheme so that London's roads can be quieter and enjoy cleaner air.



Appendix 1 – Alternative policy wording

Alternative policy wording for Part D of policy E9

C. Development proposals containing A1 uses selling food, A3 uses that could deliver food or A5 uses, will not be permitted where it is shown that they would materially contribute to an adverse impact on health.

Boroughs should draft criteria based policies that allow an assessment to be made of the health impacts of such development, which may include consideration of the following:

- (a) The range of food and drink options on offer, including the nutritional content of the food;
- (b) The extent of nutritional information made available to potential customers;
- (c) The food provenance, quality and cooking methods used;
- (d) The extent to which the proposals supports healthy living;
- (e) The content and likely effect of any measures proposed to mitigate heath impacts or otherwise support healthy living; and
- (f) Any other impacts of the proposals which may have an effect on health and wellbeing, including the economic, environmental and social impacts of the proposal.

In carrying out such an assessment the Boroughs may require a Health Impact Assessment to be carried out. Account must also be taken of any controls or other measures secured by planning condition or section 106 obligation.

D Where development proposals involving A3 uses that can delivery food A5 hot food takeaway uses are permitted, these should be conditioned to require the operator to achieve, and operate in compliance with, the Healthier Catering Commitment standard.

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6.9.6 Obesity is one of the greatest health challenges facing the capital. In London 38 per cent of Year 6 pupils (10 to 11 year-olds) are overweight or obese – higher than any other region in England. Children living in the most deprived areas of London are twice as likely to be obese as children living in the least deprived areas. The creation of a **healthy food environment**, including access to fresh food, is therefore important. So too is the need to support economic growth. The number of hot food takeaways in London has been steadily rising, with London boroughs having some of the highest densities of hot food takeaways in England. More deprived areas commonly have a higher density of hot food takeaways than other areas.



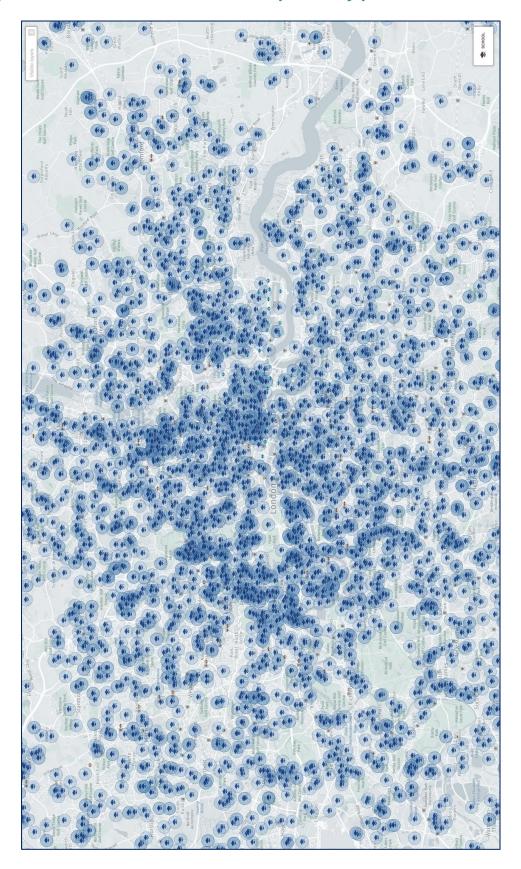
6.9.7 **Hot food takeaways** generally often sell food that is high in calories, fat, salt and sugar, and low in fibre, fruit and vegetables. There is evidence that regular consumption of energy-dense food from hot food takeaways is associated with weight gain, and that takeaway food is appealing to children. However, it is also recognised that not all hot food takeaways are the same in terms of the range and quality of food on offer. It is also acknowledged that food that is high in calories, fat, salt and sugar, and low in fibre, fruit and vegetables may also be purchased in shops trading with A1 consents, and may be delivered from restaurants trading with A3 consents. Therefore a blanket control on new development based only on its Use Class cannot be justified, and may simply divert purchases to A1 and A3 developments.

6.9.7A. It is recognised that the causes of obesity are complex and the result of a number of factors, and that a broad package of measures is required to reduce childhood obesity within London. While a A wide range of health experts recommend restricting the proliferation of hot food takeaways, particularly around schools, in order to help create a healthier food environment, evidence of a causal connection between the presence of hot food takeaways and increases in obesity is lacking. Shift and night-time workers may also find it particularly difficult to access healthy food due to the limited options available to them at night time where there are no food outlets selling healthy eating options. It is recognised that some developments that include A5 uses offer a wide range of choice including healthy meal options, and provide customers with nutritional information to inform their decisions. Development may also support heath and wellbeing through its social, economic and environmental benefits. Therefore, in setting local development plan policy, Boroughs should adopt an approach that assesses the impacts of the particular proposals and considers the extent to which mitigating measures or other beneficial aspects of a proposal can be secured by condition or section 106 obligation. National Planning Guidance supports the use of Health Impact Assessments for this purpose and their use is supported by the Mayor.

6.9.8 The **Healthier Catering Commitment95** is a scheme that helps food businesses in London to provide healthier food to their customers. The scheme promotes a reduction in the consumption of fat, salt and sugar, and an increase in access to fruit and vegetables. This can also help ensure there are healthier food options available for night workers.



Appendix 2 - Greater London school proximity plan





Appendix 3 - Food in the school fringe tends to be purchased in non-A5 properties

Food in the school fringe tends to be purchased in non-A5 properties.

- 1. Research by Professor Jack Winkler (London Metropolitan University) into the 'school fringe' found just 3/10 purchases by students in a 400m school fringe were made in A5 properties.⁷
- 2. 70% of purchases in the school fringe were made in non-fast food outlets, and the same research concluded 'the most popular shop near Urban was the supermarket, with more visits than all takeaways put together'.
- 3. Professor Winkler's findings are not an isolated case. A report by Public Health England and the LGA states that fast food school proximity restrictions do 'not address sweets and other high-calorie food that children can buy in shops near schools.'8
- 4. Research by Brighton and Hove found that 'Newsagents were the most popular premises [in the school fringe], with more pupils visiting newsagents than any A5 premises'.9
- 5. Likewise, research for the Food Standards Agency on purchasing habits in Scotland found that 'Supermarkets were the place that children reported they most frequently bought food or drinks from at lunchtime'.¹⁰
- 6. Indeed, there are several more researchers who have found no evidence to support the hypothesis that less exposure to fast food, or better access to supermarkets are related to higher diet quality or lower BMI in children.¹¹ ¹² ¹³

⁷ The School Fringe: What Pupils Buy and Eat From Shops Surrounding Secondary Schools, July 2008, Sarah Sinclair and Professor J T Winkler, Nutrition Policy Unit of London Metropolitan University

⁸ Public Health England & LGA, *Healthy people, healthy places briefing: Obesity and the environment: regulating the growth of fast food outlets,* page 5, November 2013

⁹ Brighton & Hove City Council & NHS Sussex, *Hot-food takeaways near schools; An impact study on takeaways near secondary schools in Brighton and Hove*, page 28, September 2011

¹⁰ Jennie Macdiarmid et al. Food Standards Agency. Survey of Diet Among Children in Scotland (2010) - http://www.esds.ac.uk/doc/7200/mrdoc/pdf/7200_final_report_part_2.pdf

¹¹ Forsyth, A., et al., *Do adolescents who live or go to school near fast-food restaurants eat more frequently from fast-food restaurants?* Health and Place,, 2012. 18(6): p. 1261-9.

¹² An, R. and R. Sturm, *School and residential neighborhood food environment and diet among California youth.* American Journal of Preventative Medicine, 2012. 42(2): p. 129-35.

¹³ Timperio, A.F., et al., *Children's takeaway and fast-food intakes: associations with the neighbourhood food environment.* Public Health Nutrition,, 2009. 12(10): p. 1960-4.



Appendix 5 -

Only a limited number of journeys to and from school involve a purchase at a food outlet.

1. This has been confirmed in research by the Children's Food Trust, which found that only 8% of all journeys to and from school included a purchasing visit to a food outlet.¹⁴

	Number of journeys to	Number of journeys from	Total number of journeys	Percentage (%) of all
	school	school	Gordon Arth	journeys
n	86	87	173	40-65
Journeys including a visit to a food outlet	11	6	17	10
Journeys including a purchase from a food outlet	8	6	14	8

- 2. Of the food purchases made on school journeys, confectionary was the most popular item sold which McDonald's does not offer on its menu.
- 3. Likewise, research by Ashelsha Datar concluded that children 'may not purchase significant amounts of junk food in school' partly due to 'fewer discretionary resources to purchase them'. 15
- 4. Indeed, even where purchases were made, 'children may not change their overall consumption of junk food because junk food purchased in school simply substitutes for junk food brought from home.'
- 5. Similarly, research by Fleischhacker highlighted the need for future school-based studies to 'gather information on whether or not the students attending the studied schools actually eat at the restaurants near their schools.' 16
- 6. This was also highlighted in the systematic review by Oxford University, which states 'future work should also incorporate a child's usual mode of travel to and from school into decisions about appropriate buffer distances.' The review added that age should also be taken into consideration, as this can impact on travel time and the availability of pocket change.¹⁷

http://www.childrensfoodtrust.org.uk/assets/research-reports/journey_to_school_final_findings.pdf

¹⁴ Children's Food Trust – November 2011, page 1

Ashelsha Datar & Nancy Nicosia, Junk Food in Schools and Childhood Obesity, page 12, May 2013
 S Fleischhacker et al. A systematic review of fast food access studies, page 9, 17th December 2009
 J Williams, P Scarborough, A Matthews, G Cowburn, C Foster, N Roberts and M Rayner, Nuffield Department of Population Health, University of Oxford, page 13-14, 11th December 2013. A systematic review of the influence of the retail food environment around schools on obesity-related outcomes.

Obesity and Health

Freestanding Appendix

McDonald's Response to the

Draft London Plan

1 Background facts about obesity

Defining obesity and identifying risk.

1.1 If a person expresses an interest in adopting a healthy lifestyle and losing weight, the first step should be to measure height, weight, and waist circumference to establish whether they currently have a problem with their weight, and their degree of risk. Obesity is most commonly defined in terms of a weight to height ratio, referred to as Body Mass Index (BMI).

Body mass index

1.2 The World Health Organization (WHO, 2000) standardised the definitions of weight and obesity with its well-established classification based on BMI (Appendix A). However, particularly muscular people can have a BMI that suggests they are obese by this classification, when in fact they may be particularly healthy, with no dangerous central/visceral fat and not at significant risk of cardiometabolic conditions. A healthy BMI is considered to be 18.5 to 24.9 kg/m2, overweight to be 25.0 to 29.9, and obese 30.0 or above. In children, BMI must be taken into context of age in order to correctly assess whether they are at a healthy weight. This is a function of their differing growth patterns during development (see Appendices A and B).

Waist circumference

1.3 Evidence supports a strong correlation between increasing waist circumference and the dangerous central or visceral fat that sits in and around central organs (as distinct from subcutaneous fat) that increases cardiometabolic risk (Pischon et al, 2008). Furthermore, for every 5cm increase in waist circumference there is a 17% increased relative risk of death for men and 13% for women that is independent of BMI (Pischon et al, 2008). However, more recent analyses of prospective studies suggest that the "pear" shape may not convey any lower risk than the "apple" shape, which suggests that waist circumference should supplement but not replace other indicators of risk (Emerging Risk Factors Collaboration, 2011; Huxley and Jacobs, 2011).

Therefore, until affordable tools for measuring visceral fat become available, a simple waist circumference measure is a useful indicator of risk from excess fat and should be used in addition to BMI. A waist circumference is measured by taking a tape measure reading from around the waist after expiration (breathing out). The waist is identified as the mid-point between the bottom rib and the hip bone. Central obesity in the Caucasian population is defined as a waist circumference \geq 94 cm in men and \geq 80 cm in women (International Diabetes Federation [IDF], 2006).

- 1.4 There is evidence to support lower thresholds for waist circumference in different ethnic populations but, to date, no equivalent thresholds for risk and significant risk have been accepted. However, a lower cut-off of ≤ 90 cm and ≤ 80 cm has been recommended for south Asian and Chinese men and women, respectively, and a cut-off of ≤ 85 cm and ≤ 90 cm has been recommended for Japanese men and women, respectively (IDF, 2006; Tsigos et al, 2008). Similarly, there is international variation in BMI threshold for equivalent risk, and significant risk in other countries. For example, India now uses a BMI of 23 kg/m2 for overweight and 25 kg/m2 for obese, Japan uses a BMI of 23 kg/m2 for overweight and 25 kg/m2 for obese, and Singapore uses 23 kg/m2 for overweight and 27.6 kg/m2 for obese (Shiwaku et al, 2004; Health Promotion Board, 2005).
- 1.5 Therefore, currently, the best assessment of a healthy weight in the Caucasian population is considered to be a BMI of 18.5-25.0 kg/m2, and a waist circumference of $\leq 80 \text{ cm}$ in women and $\leq 94 \text{ cm}$ in men.

The Prevalence of obesity in the general population

1.6 The Health Survey for England Report (Joint Health Surveys Unit, 2011-2013), showed that 24.9% of women and 24.7% of men aged 16 or over were classified as obese (BMI >30 kg/m2). In total, 57.5% of women and 66.3% of men were classified as either overweight (BMI 25–30 kg/m2) or obese. This suggests that the majority of the population, and the people that are seen in primary care on a daily basis, are more likely to have a weight problem than be of a healthy weight. If current trends continue then projections made by the Foresight Report (2007) suggest that by 2050, 9 out of every 10 adults will be overweight or obese, and 50% of adults will be classified as obese by BMI (see Appendices C-E).

1.7 The National Child Measurement Programme (NCMP) for 2014-15, showed that in Reception year (ages 4-5 years) 9.1% of pupils were obese and 21.9% overweight or obese, and that in Year 6 (ages 10-11 years) 19.1% of pupils were obese and 33.3% overweight or obese. These prevalence rates continue to rise and they may add to the prevalence of adult obesity in the future (see Appendices F-H).

Health impacts of obesity

- Obesity in adults is an important risk factor for a number of chronic conditions including hypertension, coronary heart disease, stroke, type 2 diabetes and some cancers (Kopelman, 2007). Furthermore, obesity is also directly related to increased mortality and lower life-expectancy (Lee et al, 1993; Adams et al, 2006). In the UK, it is estimated that obesity is responsible for more than 30,000 deaths each year (6% of all deaths) (National Audit Office, 2001).
- 1.9 Evidence suggests that weight loss in obese and overweight people produces a variety of health benefits (Avenell et al, 2004). Clinical benefits include improvements in osteoarthritic pain, respiratory conditions and obstructive sleep apnoea (Goldstein, 1992), and a delay or prevention of type 2 diabetes in high-risk individuals (Tuomilehto et al, 2001; Knowler et al, 2002). Obesity increases the relative risk of developing type 2 diabetes by 12.7 times in women and by 5.2 times in men (National Audit Office, 2001). Studies have shown reductions in mortality in overweight individuals with type 2 diabetes associated with intentional weight loss (Aucott, 2008).
- 1.10 As the prevalence of obesity increases, it is expected that the associated medical problems will also increase. Long-term weight loss after bariatric surgery for severe obesity has also been associated with decreased overall mortality (Adams et al, 2007; Sjöström et al, 2007).

2. The "causes" of obesity

The Foresight Report: multiple factors

2.1 In 2007, the Foresight Report showed that there are in fact over 100 different factors involved in why we as individuals, or we as a society, are becoming more obese. This is fundamentally why it is proving to be so difficult to tackle, prevent or reverse the obesity epidemic. No one single intervention is likely to have much of an impact at a public health level, as there are so many other factors involved (see Appendix I).

The McKinsey Report: ranking of interventions

2.2 In November 2014, the McKinsey Report stated that obesity was responsible for 5% of deaths worldwide. In this report, interventions were ranked in terms of evidence and impact. Perhaps because of the overall number of factors involved in obesity, public health campaigns had the least amount of impact and the least amount of evidence. Coming top, with the most amount of evidence, and the most amount of impact, is portion size, which ultimately is at the control of the individual and down to personal choice. Reformulation was listed second (see Appendix J).

Genetic factors

- 2.3 We now know that there are genes associated with obesity. At last count we know of hundreds that are associated with obesity, and their presence of expression is a current source of research. However, the genes identified so far do not "cause" obesity. Instead, they are associated with increased craving for calorie dense foods, indirectly increasing the predisposition to obesity. However, cravings can be overcome with willpower and it is often unhelpful to screen for genetic carriers of "obesity genes" as it can introduce a further psychological barrier to weight loss for the individual, and does not influence their future management.
- 2.4 More recently, there has been increasing evidence to suggest "epigenetic" factors may have a role to play. The evidence suggests that whether an individual has a predisposition to favouring high calorie dense foods, or sedentary behaviour in preference to physical activity, may be strongly influenced by the behaviour of their mother while they are in the womb, and even their maternal grandmother whilst

their mother was in the womb. This suggests that there may be a genetic "memory" influencing the expression of an individual's genotype that is beyond their control (see Appendix K).

Tracking

- 2.5 Evidence exists that supports the tracking of obesity in children, i.e. that obese children become obese teenagers and then adults, and that it is not just "puppy fat" and that they do not just "grow out of it". The Early Bird Study provides evidence that the weight of a child at very young ages, earlier than the age of 5 years, may predict the likelihood of that individual becoming an obese adult. More recent evidence published in 2016 has proposed that weight at the age of 6 months may be a strong predictor, suggesting that weight management advice and interventions are being introduced too late.
- 2.6 Data provided by specialist childhood weight management provider More Life shows that obese teenagers result primarily from obese children. 62-98% of all obese teenagers were obese at the age of 5 years. Only 0.5-8% of children who were a healthy weight at the age of 5 years become obese teenagers. This suggests that a focus should be made on those children who are obese at an early age as these are most likely to become obese in later life, and statistically much more likely than those who are at a healthy weight in early age. This has implications for resource planning, and the targeting of public health campaigns (see Appendix L).

Socioeconomic factors

2.7 There is clear evidence to suggest that health inequalities are linked to social and economic issues. Furthermore, both excess weight and tooth decay are associated with deprivation in England. However, with obesity, careful interpretation of the data is required. For example, Public Health England have published data (National Obesity Observatory website) showing that obesity prevalence increases as deprivation (as measured by the index of multiple deprivation) increases. However, there is no cause and effect to explain the true nature as to why this is, especially as other data, such as lower physical activity levels are also associated with lower income. There are many possible causal factors for this association (see Appendices M-O).

- In "Forecasting Obesity to 2010", the Joint Health Survey Unit demonstrated that inner city living was associated with higher prevalence levels of obesity in children when compared with rural living. However, the difference was very small when compared with the difference in prevalence demonstrated by having one obese parent, or even greater when both parents were overweight. This suggests that parental obesity is likely to be a bigger factor in childhood obesity than social and economic factors, although it does not demonstrate whether this finding is due to genetics, epigenetics, learned behaviour or the obeso-genic environment (see Appendix P).
- 2.9 Weight management interventions were listed in the McKinsey Report as having a greater level of evidence, and a greater impact on managing obesity, than public health interventions. If an individual is motivated for weight loss, and resources are available, we can tackle obesity at an individual level, even if we may struggle at a societal level. Treatment can be considered as a form of prevention. Treating the overweight prevents obesity, and treating the obese prevents morbid obesity. This has important strategic implications for the management of the obesity epidemic (see Appendix Q).

The biochemistry and physiology of obesity

- 2.10 Our understanding of the fat cell has improved recently and it should no longer be thought of as just somewhere excess calories are stored. It is one of the most metabolically active organs in the body, and produces chemicals (adipocytokines) that are involved in most pathological processes in the body. The role of the adipocytokines released by the fat cell and their link in the development of insulin resistance, inflammatory markers and dyslipidaemia is becoming clearer.
- 2.11 Genetic and environmental factors clearly play a part in the development of obesity, but they may also have a role in appetite regulation, exercise tolerance, and metabolic efficiency, causing an indirect effect on levels of adiposity (McCarthy, 2008). This visceral fat will cause low grade inflammation, insulin resistance, dyslipidaemia, and many other pathologies associated with co-morbidities. A cycle will then develop with further beta-cell dysfunction, resulting in excess glucose production, impaired glucose uptake and utilisation, and ultimately further insulin resistance, impairment of glucose homeostasis and the development of type 2

diabetes (Brewster, 2008). One way to break this cycle is to prevent the development of the central adiposity.

3. The Management of Obesity

Avoiding obesity

- 3.1 Common sense may suggest that prevention is better than treatment. However, when it comes to the obesity epidemic this will always remain difficult because of the many different causes of obesity. The Foresight Report suggests there are over 100 different factors involved in why we as individuals or we as a society are becoming more obese, and it is impractical, and unachievable, to tackle all of these different factors. The McKinsey Report further supported this, when their independent review demonstrated that public health interventions had a relatively small amount of evidence, and an overall low impact on the obesity epidemic (see Appendices I & J).
- 3.2 However, obesity can be managed at an individual level. Not only will weight management interventions help a motivated overweight/obese individual reach a healthy weight, with all the associated health benefits, simple weight management strategies can be used to avoid obesity. If healthy weight individuals follow general principles of a healthy lifestyle, diet, physical activity, and address any "emotional" eating (for example, comfort eating and habit eating) they will not become obese.
- 3.3 Comprehensive guidance on the prevention and management of overweight and obesity in adults and children was published by NICE in 2006 (NICE and National Collaborating Centre for Primary Care [NCCPC], 2006). Many people may feel uncomfortable about raising and discussing the issue of body weight, but because it is such an important health concern it may fall to the clinician to broach the subject. Individuals should ideally be managed by a multidisciplinary team (MDT). Management should involve modification of lifestyle, diet and physical activity, and when appropriate, specific diets, weight loss pharmacotherapy or weight loss surgery (see Appendix R).
- 3.4 In July 2015, NICE published the Quality Standards for Obesity: prevention and lifestyle weight management in children and young people (QS94). This has been recently supplemented with NICE Quality Standards for Obesity: Clinical Assessment and management (QS 127) in Aug 2016, which has emphasized the importance of integrated and structured weight management programmes in the treatment of obesity and their important role in preventing further weight gain.

3.5 Also in August of 2016, we saw the long-awaited publication of the UK Government Childhood Obesity Strategy. This was published to much criticism for not going far enough, and focussing far too much on population based public health interventions with limited evidence of effectiveness, which in isolation are believed to be unlikely to have much impact on the obesity epidemic. It focussed of sugar reduction and increasing physical activity. This included support for a modest sugar tax which is expected to be passed on to the consumer in the hope of influencing choice at the point of purchase.

Lifestyle advice

3.6 Whenever possible, weight loss intervention should use the combination of low-calorie diets, increased physical activity and behaviour modification so that total energy intake is less than energy expenditure. Lifestyle changes should be tailored to the individual. Small, manageable changes to lifestyle are likely to be more successful than attempts to radically alter their diet and physical activity.

Diet

3.7 Diets should be tailored to the individual. Whenever possible, dictating to a person what food they should eat should be avoided to encourage adherence, and an individual's food preferences should be taken into account. A hypo-caloric diet (i.e. one that has fewer calories than the body needs) that has a 500–600 kcal/day deficit below a person's daily requirement (as predicted by the Harris-Benedict or Schofield equations, or by the use of specialist equipment), in combination with support and follow-up, is recommended for sustainable weight loss (NICE and NCCPC, 2006).

The role of sugar and fat

3.8 Questions have recently been raised concerning what macronutrients are most responsible for obesity, and indeed what constitutes a "healthy" balanced diet. There is current debate among experts as to whether sugar consumption is more responsible than fat for causing the obesity epidemic, with sound clinical arguments to support this (Taubes G. BMJ 2013; 346:f1050 Watts G. BMJ 2013;346:e7800). Furthermore, a recent meta-analysis and systematic review of 72 studies (45 cohort studies and 27 RCTs) demonstrated that with the exception of trans fats which was associated with increased coronary disease risk, and in contrast to current dietary recommendations, there was no evidence to suggest that saturated fat increases

- the risk of coronary disease, or that polyunsaturated fats have a cardio-protective effect (Chowdury et al, 2014).
- 3.9 Current UK guidelines remain unchanged (men should consume no more than 30g of saturated fat per day, and women no more that 20g per day) (NHS Choices). However, opinion remains divided on whether current nutritional guidelines reflect the current evidence base. On 17 March 2016, the previous Eatwell Plate was Guidelines, reflecting fact replaced with Eatwell the that nutritional recommendations are far from accepted, and on publication the new guidelines were greeted with criticism and disagreement. This reflects the fact that the current evidence base for what constitutes a "healthy" diet just is not there. Clearly further research is required to establish the macronutrient composition for a healthy balanced diet, but it should be remembered that there is no disputing that eating more than the body requires for the respective amount of physical activity will lead to obesity which will increase the risk of coronary heart disease among other comorbidities. Fundamentally, the amount of calories consumed comes down to a function of portion size and personal choice regarding the amount consumed (see Appendices S and T).
- 3.10 The evidence base relating to what constitutes healthy nutrition in children is even less complete and in many ways conflicts with what is known in adult nutrition. For example, evidence suggests that a diet that is high in protein in adults is protective against obesity (as protein helps to increase gut hormones that promote satiety), however, in children, especially under the age of 5 years of age, evidence suggests that a diet high in protein appears to promote obesity. Therefore, unless more research is carried out we are unable to base child nutritional guidelines on the assumption that they are "mini-adults".
- 3.11 The National Diet and Nutrition Survey suggests that for young people the intake of saturated fat, sugar and salt remains too high, and the intake of fibre, fruit and vegetables remains too low.
- 3.12 Fundamentally, current evidence suggests that macronutrient composition, in an otherwise isocaloric diet, does not influence weight, i.e. diets that differ in protein, fat or sugar content may result in different levels of hunger/satiety, but if the total calories are the same then they will all result in the same weight change. A systematic review and meta-analysis of randomised controlled trials and cohort

studies (Te Morenga L et al, 2013) concluded that the change in body fatness occurs with modifying intakes seems to be mediated via changes in energy intake, rather than macronutrient. It appears that the most important thing that matters when it comes to weight gain is whether someone consumes more calories than their body needs given their metabolic requirements and physical activity levels.

Physical activity

- 3.13 Physical activity is thought to be key to the maintenance of weight loss (Hill et al, 2005). The current Government recommendation in England is for a minimum of 30 minutes of moderate intensity physical activity on at least 5 days per week for general health, but for weight loss or maintenance of reduced weight, physical activity should be increased to 60–90 minutes on at least 5 days per week (NICE and NCCPC, 2006). The level, and type, of physical activity should depend on what is achievable for the individual and should focus on what is acceptable within their normal lifestyle in order to improve adherence.
- 3.14 Being aware of the obesogenic environment in which we live may also be beneficial. Encouraging individuals to take the stairs instead of a lift or escalator, and parking further away from the entrance to the supermarket, for example, can be as beneficial as planned physical activity. More walking should be encouraged, especially with short distances that are travelled by car, and reduce sedentary behaviour such as watching television.
- 3.15 A meta-analysis of controlled clinical trials performed in 2001 showed that no significantly greater change in body mass was found when exercise groups were compared with control groups (Boulé et al, 2001). More recently, experts have started to accept the limitations of physical activity as a form of weight loss. A one mile run burns up only about 100 kcals but the individual may treat themselves for that activity with a chocolate bar containing 200 kcals. Unless the Government's recommended levels of physical activity are met (in which metabolic rates can be changed) exercise is a very inefficient way of weight loss, and it led to Dr Aseem Malhotra being quoted in 2015 as stating that "you cannot outrun a bad diet". However, the benefits of physical activity on fitness and cardiometabolic health are very well documented and accepted and individuals need to be encouraged to exercise for these reasons alone.

Behaviour therapy and "talking therapies"

- 3.16 Behaviour therapy involves changing diet and physical activity patterns to those that promote a healthier lifestyle. Behavioural therapy strategies have varying levels of adherence and effectiveness, but include recording diet and exercise patterns in a diary, identifying and avoiding high-risk situations (such as having high-calorie foods in the house, or mid-morning snacks with work colleagues when not really hungry), and changing unrealistic goals and false beliefs about weight loss and body image to realistic and positive ones. When used in combination with other weight loss approaches, behaviour therapy provides additional benefits in assisting people in losing weight (Shaw et al, 2005).
- 3.17 The evidence for the successful use of these techniques in weight management is not yet as convincing as being equal to other interventions, and good quality randomised controlled trials are required to assess their true role. However, a recent systematic review (Paretti 2016) demonstrated that the inclusion of talking therapies with weight loss interventions did help with weight loss (albeit the effect was limited) but there may be a significant role for the talking therapies in helping to prevent weight regain. There is no doubt that some people prefer these approaches, and treatment should be tailored to the individual.

References

Action On Salt. www.actiononsalt.org.uk. Accessed Jan 2016

Adams KF, Schatzkin A, Harris TB et al (2006) Overweight, obesity, and mortality in a large prospective cohort of persons 50 to 71 years old. *N Engl J Med* **355**: 763–78

Adams TD, Gress RE, Smith SC et al (2007) Long-term mortality after gastric bypass surgery. *N Engl J Med* **357**: 753–61

Aucott LS (2008) Influences of weight loss on long-term diabetes outcomes. *Proc Nutr Soc* **67**: 54–9

Avenell A, Broom J, Brown TJ et al (2004) Systematic review of the long-term effects and economic consequences of treatments for obesity and implications for health improvement. *Health Technol Assess* 8: 1–182

Boulé NG, Haddad E, Kenny GP et al (2001) Effects of exercise on glycemic control and body mass in type 2 diabetes mellitus: a meta-analysis of controlled clinical trials. *JAMA* **286**: 1218–27

Brewster A (2008) Body composition and presentation of type 2 diabetes. *Diabetes & Primary Care* **10**: 206–15

Childhood Obesity: A Plan for Action (2016). HM Government

Chowdury et al. (2014). Association of Dietary, Circulating, and Supplement Fatty Acids With Coronary Risk; A Systematic Review and Meta-analysis. Annals of Internal Medicine.

Emerging Risk Factors Collaboration (2011) Separate and combined associations of bodymass index and abdominal adiposity with cardiovascular disease: collaborative analysis of 58 prospective studies. *Lancet* **Mar 10** [Epub ahead of print]

Foresight (2007) *Tackling Obesities: Future Choices Project.* Government Office for Science, London

Goldstein DJ (1992) Beneficial health effects of modest weight loss. *Int J Obes Relat Metab Disord* **16**: 397–415

He FJ et al. (2008) Hypertension 51; 629-634

Health Promotion Board (2005) *Revision of Body Mass Index (BMI) Cut-offs in Singapore.*Health Promotion Board, Singapore. Available at: http://bit.ly/lfS4bv (accessed 19.05.11)

Hill JO, Thompson H, Wyatt H (2005) Weight maintenance: what's missing? J Am Diet

Assoc 105(5 Suppl 1): S63-6

Huxley RR, Jacobs DR Jr (2011) Size still matters...but not in the way we once thought. Lancet Mar 10 [Epub ahead of print]

International Diabetes Federation (2009) *IDF Diabetes Atlas.* IDF, Brussels. Available at: http://bit.ly/iWF7RH (accessed 19.05.11)

Joint Health Surveys Unit (2011) *Health Survey for England 2009.* NHS Information Centre for Health and Social Care, Leeds

Knowler WC, Barrett-Connor E, Fowler SE et al (2002) Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med* **346**: 393–403

Kopelman P (2007) Health risks associated with overweight and obesity. *Obes Rev* **8**(Suppl 1): 13–17

Lee IM, Manson JE, Hennekens CH, Paffenbarger RS Jr (1993) Body weight and mortality. A 27-year follow-up of middle-aged men. *JAMA* **270**: 2823–8

Ludwig DS et al. (2001) Lancet 357; 505-508

McCarthy MI (2008) Casting a wider net for diabetes susceptibility genes. *Nat Genet* **40**: 1039–40

National Audit Office (2001) *Tackling Obesity in England. Report by the Comptroller and Auditor General.* The Stationery Office, London. Available at: http://bit.ly/iwdzit (accessed 19.05.11)

National Obesity Observatory (NOO) website. www.noo.org.uk. Accessed march 2016.

NICE, National Collaborating Centre for Primary Care (2006) Obesity: The Prevention, Identification, Assessment and Management of Overweight and Obesity in Adults and Children. Clinical Guideline 43. NICE, London

NICE (2015) Clinical Guidelines 189. A partial update of CG 43; management of obesity NHS Choices (2013) Fat: the facts

Paretti H, et al. (2016). Clinical effectiveness of very low energy diets in the management of weight loss: a systematic review and meta-analysis of randomised controlled trials.

Obesity Reviews. Vol 17, iss 3; 225-234. Mar 2016

Pischon T, Boeing H, Hoffmann K et al (2008) General and abdominal adiposity and risk of death in Europe. *N Engl J Med* **359**: 2105–20

- SACN Report (2015) Carbohydrates and Health. London
- Shaw K, O'Rourke P, Del Mar C, Kenardy J (2005) Psychological interventions for overweight or obesity. *Cochrane Database Syst Rev* **2**: CD003818
- Shiwaku K, Anuurad E, Enkhmaa B et al (2004) Overweight Japanese with body mass indexes of 23.0-24.9 have higher risks for obesity-associated disorders: a comparison of Japanese and Mongolians. *Int J Obes Relat Metab Disord* **28**: 152–8
- Sjöström L, Narbro K, Sjöström CD et al (2007) Effects of bariatric surgery on mortality in Swedish obese subjects. *N Engl J Med* **357**: 741–52
- Taubes G. BMJ 2013; 346:f1050 Watts G. BMJ 2013;346:e7800
- Te Morenga L et al. (2013). Dietary sugars and body weight: systematic review and metaanalysis of randomised controlled trials and cohort studies. BMJ 2013; **346**:e7492
- Tsigos C, Hainer V, Basdevant A et al (2008) Management of obesity in adults: European clinical practice guidelines. *Obes Facts* 1: 106–16
- Tuomilehto J, Lindström J, Eriksson JG et al (2001) Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. *N Engl J Med* **344**: 1343–50

Watts G. BMJ 2013;346:e7800

World Health Organization (2000) Obesity: preventing and managing the global epidemic. Report of a WHO consultation. *World Health Organ Tech Rep Ser* **894**: 1–253

Glossary

All sources from http://medical-dictionary.thefreedictionary.com/ unless otherwise stated.

Adiposity – excessive accumulation of lipids (a naturally occurring fat) in a site or organ (in other words obesity).

Adipocytokines – a molecule secreted by fat cells that affects the physiology of cells in other parts of the body – these can influence appetite, the storage of fat in the body, and systemic inflammation.

Beta-cell dysfunction – these cells produce insulin, and become dysfunctional in type 1 diabetes and sub-optimal in type 2.

Cardiometabolic – heart disease and metabolic disorders (i.e. diabetes).*

Cardio-protective – capable of shielding the heart from damage caused by infections, toxins and disturbances.

Co-morbidities – two or more coexisting medical conditions or disease processes that are additional to an initial diagnosis.

Dyslipidaemia – an abnormal concentration of lipids or lipoproteins (a mixture of fat and protein) in the blood.

Epigenetics – the study of changes in genetics stemming from external causes (without a change in the DNA sequence).

Ghrelin – a hormone that is stored by cells in the stomach and promotes hunger before an expected meal, decreases in amount after eating, and promotes the storage of growth hormones.

Glucose homeostasis – the balance of insulin and glucagon to maintain blood glucose. **

Harris-Benedict equation – an equation based on a person's height, age and weight that is used for estimating caloric needs.

Hypo-caloric – a diet or meal which possesses few calories.

Inflammatory markers – the body can react to obesity in the same way as to infections and generate inflammatory responses (such as swelling).

Isocaloric diet – containing the same number of calories as the food or diet with which it is being compared (a strictly regulated diet which sticks to the same calories every day, often used to lose weight).

Macronutrients – a general term for an essential dietary component – protein, essential fats and carbohydrates.

Meta-analysis – a statistical analysis which brings together multiple studies. *Metabolic* – the chemical processes of an organ or organism.

Obesogenic environment – an environment which causes or promotes obesity.

Obstructive sleep apnoea – a condition in which breathing stops for more than ten seconds during sleep, often waking up the individual. Often causes daytime sleepiness and affects quality of life.

Osteoarthritic pain – pain stemming from degenerative joint disease caused by a gradual loss of cartilage.

Pharmacotherapy – the treatment of disease with medicines.

Polyunsaturated fats – a non-animal oil or fatty acid rich in unsaturated chemical bonds not associated with the formation of cholesterol in the blood. In other words these are types of fat found in plant foods and fish.

Schofield equations – a method of estimating the basal metabolic rate (the amount of energy expended daily by humans, otherwise known as BMR) of men and women. Subcutaneous fat – fat that is stored directly under the skin. Women have a higher percentage of this than men.

Tier 3 service – Tier 3 services are an NHS service dealing with medical, multi-disciplinary, multi-component weight management services for obese patients requiring specialised management, including bariatric surgery.***

Bariatric surgery – bariatric surgery promotes weight loss by changing the anatomy of the digestive system. This can include stomach stapling, gastric bands and intestinal bypass.

Visceral fat – visceral fat accumulates around internal organs. It is more common in men than in women.

Trans-fats – these are a fat derived from vegetable products like margarine, frying fats and shortenings, formed by partial hydrogenation (hardening of fats).

^{*}https://www.wordnik.com/words/cardiometabolic

^{**}http://www.nbs.csudh.edu/chemistry/faculty/nsturm/CHE452/24_Glucose%20Homeostas.htm

^{***} http://www.britishjournalofobesity.co.uk/journal/2015-1-1-25

Appendix A

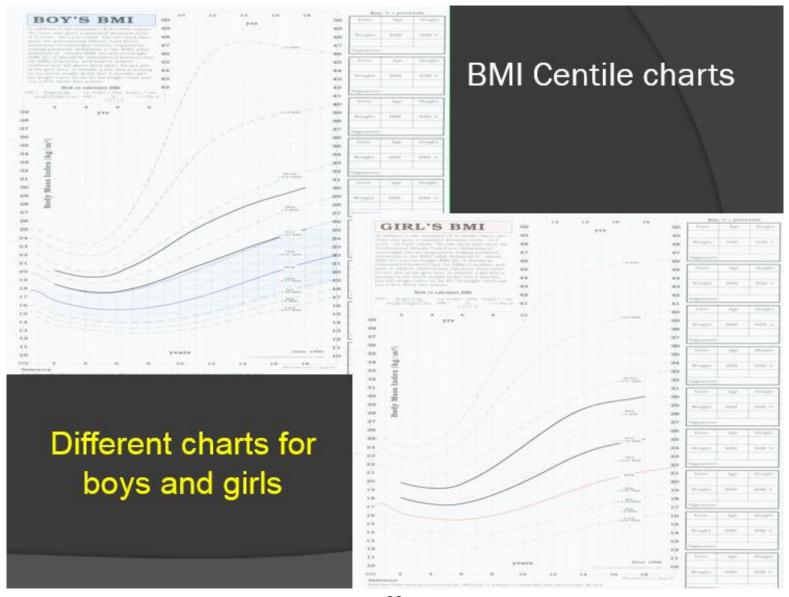
BMI classification of obesity

BMI = weight(kg)/height(m)2

WHO Classification	BMI	Risk of Comorbidity
Underweight	Below 18.5	Low (but risk of other clinical problems increased)
Healthy weight	18.5-24.9	Average
Overweight	25.0-29.9	Mild increase
Obese	>30.0	
Grade 1 obesity	30.0-34.9	Moderate increase
Grade 2 obesity	35.0-39.9	Severe increase
Grade 3 obesity (morbid obesity)	>40.0	Very severe

Source: Adapted from WHO, 1995, WHO, 2000 and WHO 2004

Appendix B



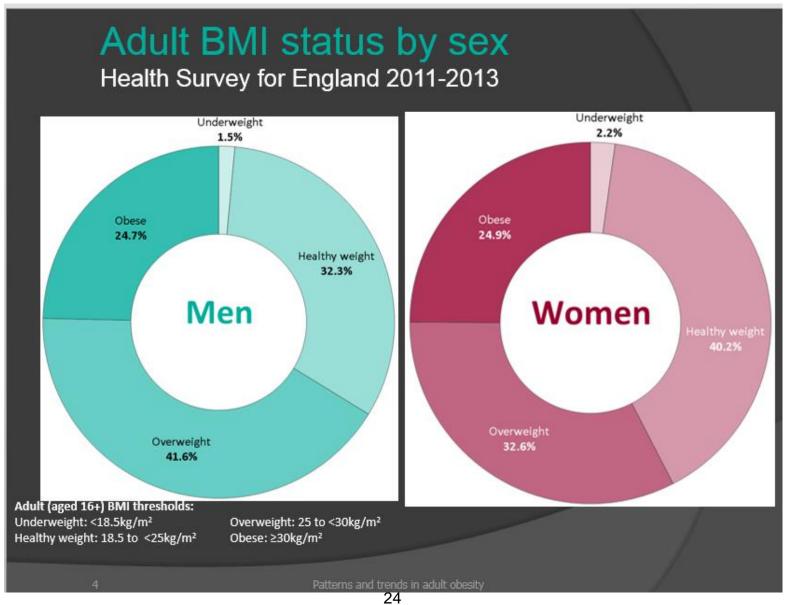
Appendix C

Almost two thirds of adults and one third of children have a weight problem

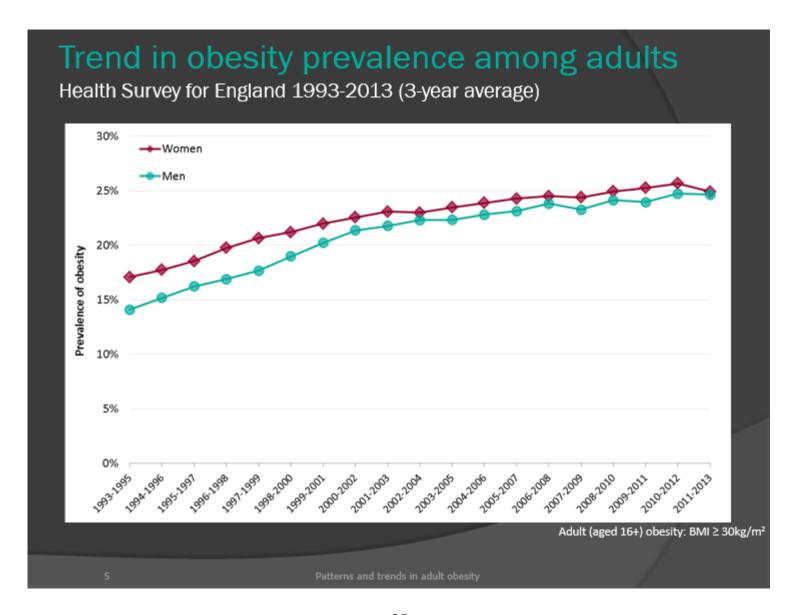
- UK obesity prevalence is the highest in Europe¹
- 67% of men and 57% of women are overweight or obese²
 - 25% of adults were obese in 2013
 - a further 42% of men and 32% of women were overweight²
- In 2012/13,
 - 22% of Reception children were either overweight or obese³
 - 33% of Year 6 children were either overweight or obese³
 - 9.3% of Reception children and 19% of Year 6 children were classed as obese, showing a doubling between the two age groups³

Organisation for Economic Co-operation and Development (2012) Health at a Glance: Europe 2012. Overweight and Obesity
Among Adults. Available at: http://bit.ly/1t4ejlH (accessed: 15.04.2014);
 Health and Social Care Information Centre (2013) Health
Survey for England - 2012, Trend tables: Adult trend tables. Available at: http://bit.ly/1edgqPZ (accessed: 08.04.2014);
 Health and Social Care Information Centre (2013) National Child Measurement Programme - England, 2012-13 school year.
Available at: http://bit.ly/1lHKiDT (accessed: 08.04.2014)

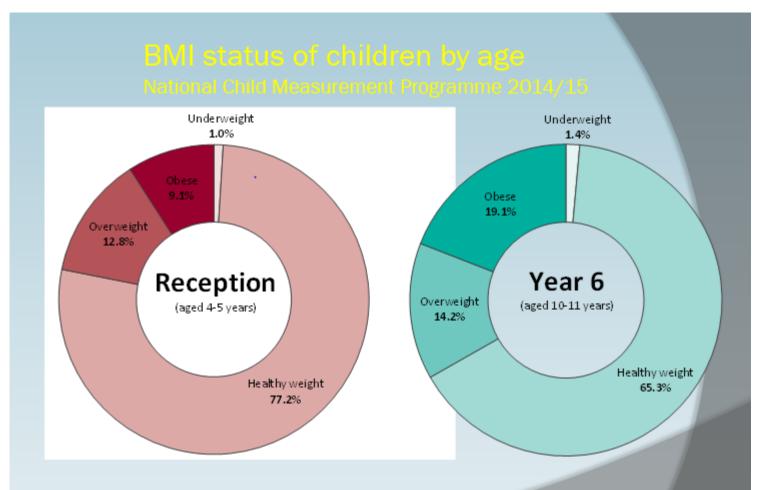
Appendix D



Appendix E

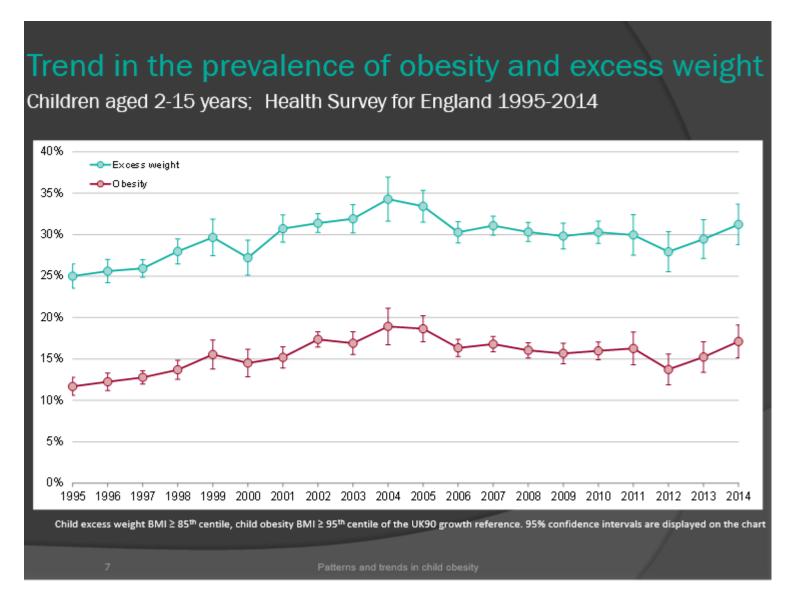


Appendix F

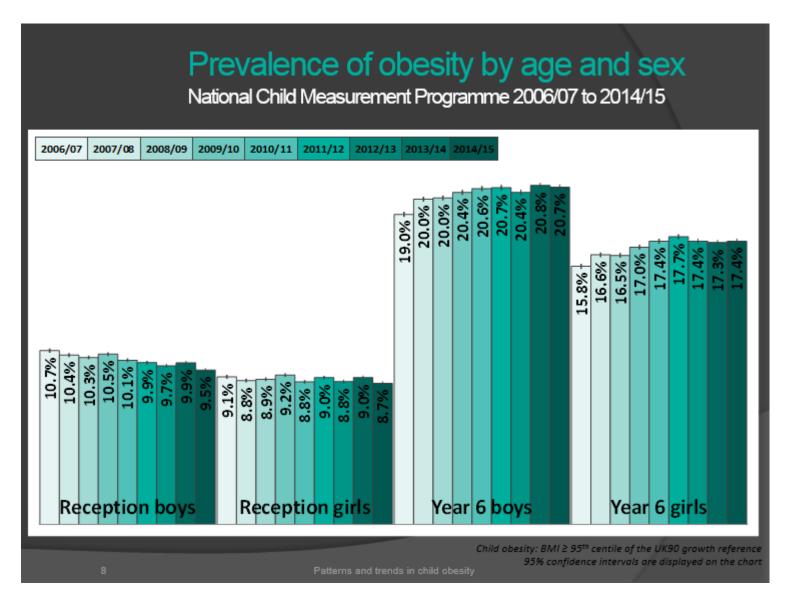


This analysis uses the 2nd, 85th and 95th centiles of the British 1990 growth reference (UK90) for BMI to classify children as underweight, healthy weight, overweight and obese. These thresholds are the most frequently used for population monitoring within England.

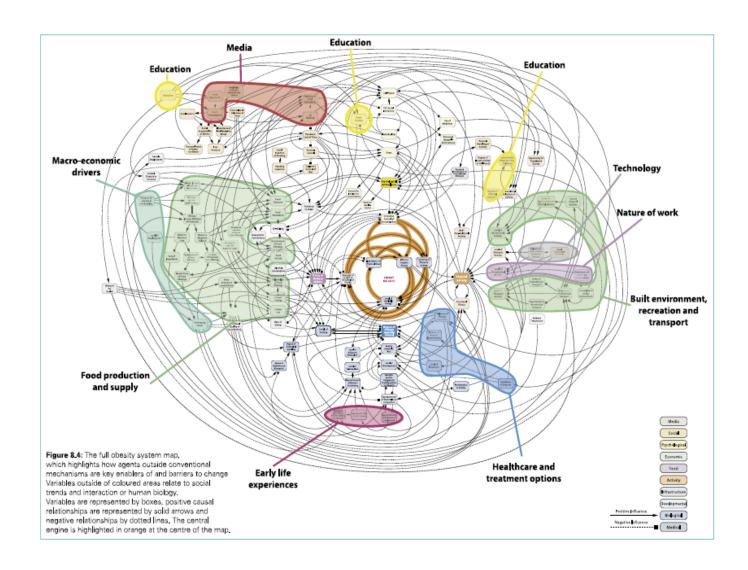
Appendix G



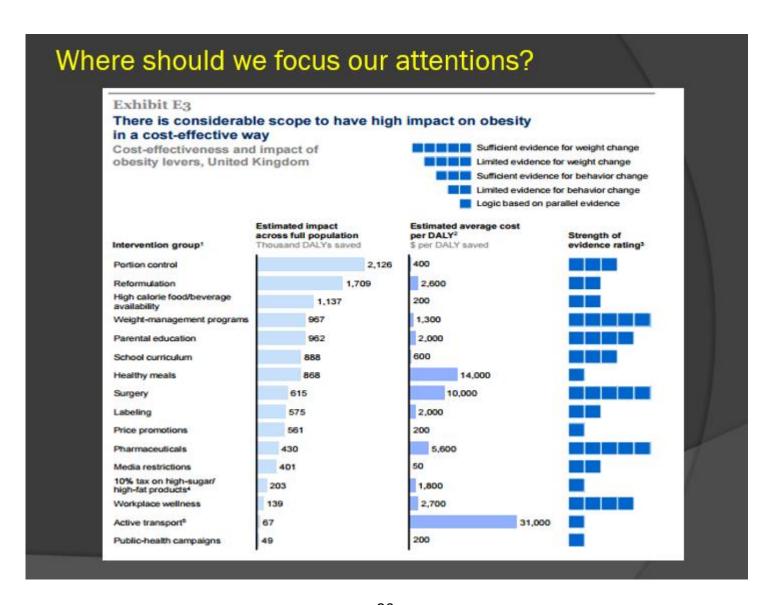
Appendix H



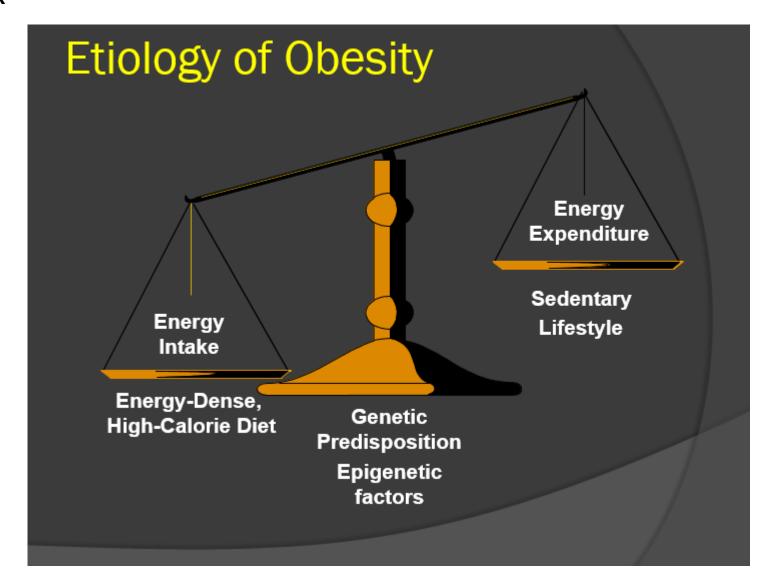
Appendix I



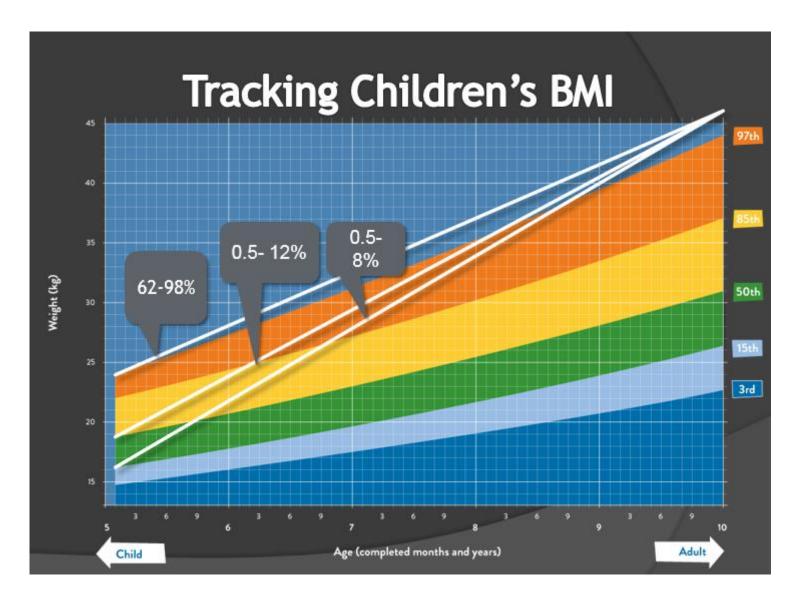
Appendix J



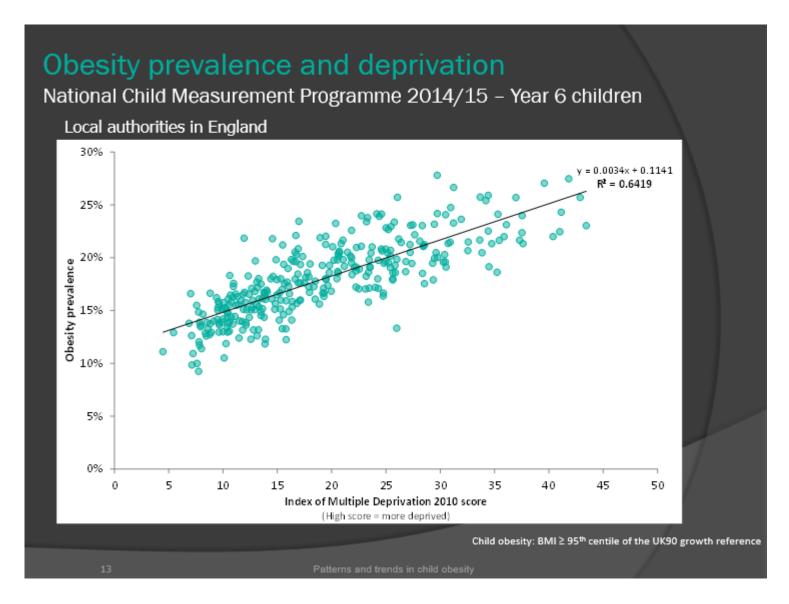
Appendix K



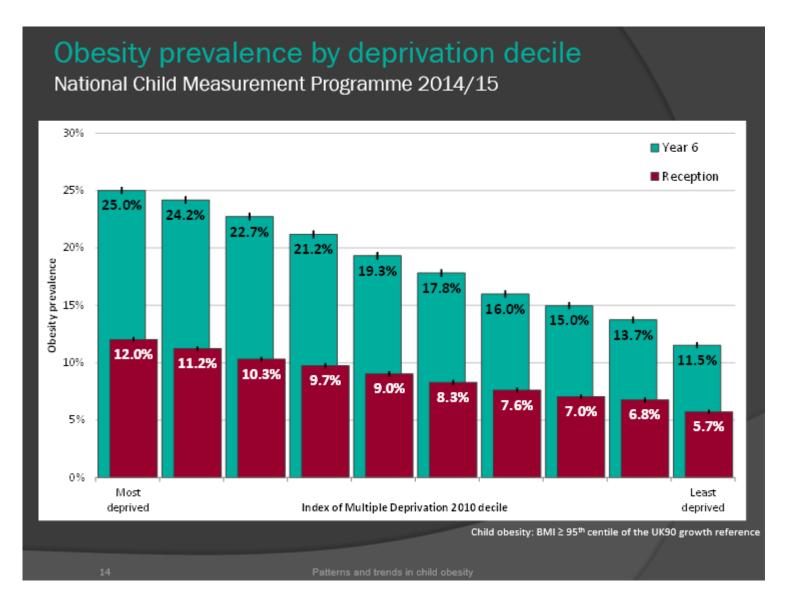
Appendix L



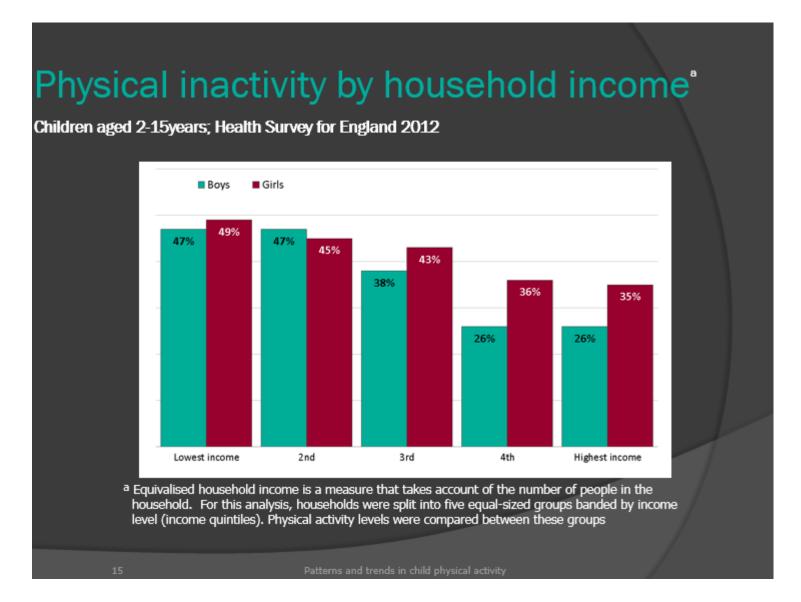
Appendix M



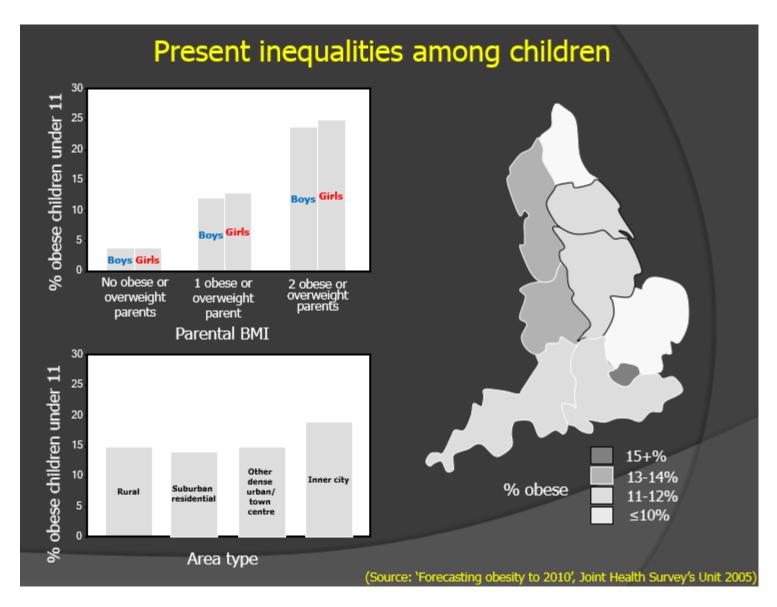
Appendix N



Appendix O



Appendix P



Appendix Q



Appendix R

Childhood Obesity - NICE Guidance

- Supportive and motivating environment
- Family involvement
- Behaviour modification, e.g. goal setting,
- Dietary education and advice
- Reduce sedentary behaviours
- ↑ regular lifestyle activity
- ↑ regular structured physical activity / exercise
- Delivery by trained professionals
- Long term support

Source: NICE (2006)

Appendix S



Appendix T

