

LONDON BOROUGH OF
HAVERING

Prevention of
obesity needs
assessment

2016

Deep Dive

Joint Strategic Needs
Assessment

*By London Borough of Havering
Public Health Service*

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List of Acronyms

BME	Black, Asian and other minority ethnic groups
BMI	Body Mass Index
GP	General Practice
HSCIC	Health and Social Care Information Centre
HSE	Health Survey for England
LPA	Local Planning Authorities
MECC	Make Every Contact Count
NAO	National Audit Office
NCMP	National Child Measurement Programme
NICE	National Institute of Health and Care Excellence
NOO	National Obesity Observatory
NPPF	National Planning Policy Framework
PHE	Public Health England
SACN	Scientific Advisory Committee on Nutrition
UK	United Kingdom
VCS	Voluntary and Community Sector
WHO	World Health Organisation

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Executive Summary

1. The case for tackling obesity: why is it an issue?

Definition

- Overweight and obesity is excessive fat accumulation that may impair health.
- Obesity is usually categorised in terms of Body Mass Index (BMI).
- BMI is calculated by dividing weight (in kilograms) by height (in metres) squared.
- People with a BMI of 30 or greater are obese; 25 – 29 are overweight.

Prevalence

- Levels of obesity in Havering are similar to the national average - more than a quarter of adults are obese and two-thirds are overweight or obese (110,000 residents).
- The prevalence of adult obesity in England has more than doubled in the past twenty-five years.
- Rates of morbid obesity have doubled in the last twenty years – to 2.7% of adults in 2014 (5,700 Havering residents).
- 1 in 10 Havering children (290) in Reception Year (age 4-5) are obese; almost a quarter of the children (680) are overweight or obese. Levels of obesity amongst Reception Year children resident in Havering are similar to those in London but significantly higher than England average.
- 1 in 5 Havering children (530) in year 6 (age 10 - 11) are obese; more than a third are overweight or obese. Levels of obesity in Havering for Year 6 children are similar to the London and England averages.
- Levels of obesity double from 1 in 10 to 1 in 5 during the primary school years.
- 70-80 children in each school year are likely to be severely obese – equivalent to an adult BMI of 35 or higher.
- About 1 in 5 women of child bearing age are obese.

Trend

- Data regarding trends in adult obesity are currently not available at local level. Data from the Health Survey for England (HSE) show that the prevalence of obesity increased from 15% in 1993 to 26% in 2014 and the percentage with a healthy body weight decreased by a similar proportion.
- Data from the National Child Measurement Programme (NCMP), suggest that childhood obesity levels in Havering have been more or less stable since its inception in 2006/7

Key inequalities

- More men than women are overweight; more women than men are obese and morbidly obese.
- The prevalence of obesity varies between ethnic groups as does the risk of harm associated with a given BMI level. As a result, 'Black' and 'Asian' communities are at greater risk of obesity related harm.

- People with physical disabilities, long term health problems and learning disabilities are more likely to be obese.
- Adults, particularly women, living in disadvantaged communities are more likely to be obese than peers living in more advantaged communities.
- At both reception and Year 6, children in all but the 'White' and 'Chinese' ethnic groups have significantly higher prevalence of obesity than the average for 'all' children. The prevalence is particularly high amongst 'Black' children.
- Children with a limiting illness are more likely to be obese or overweight, particularly if they also have a learning disability – children with both conditions were almost twice more likely to be overweight or obese than children with neither.
- Obesity prevalence in children is strongly correlated with disadvantage. Prevalence in the most deprived decile is about twice that in the least deprived for both reception and Year 6 children.

Harmful Effects: burden of disease and financial cost

- Obese adults are more likely to die prematurely (e.g. from cancer and circulatory diseases), develop limiting long term illness (e.g. diabetes and osteoarthritis) and experience mental illness (e.g. anxiety and depression).
- Maternal obesity is a risk in the short term to the health of both mother and baby but also increases the risk that the child and possibly their children may be obese.
- Obese and overweight adolescents have a third more sick days than peers with a healthy body weight as a result of the physical and mental health problems associated with childhood obesity.
- Obese children are between 2 and 10 times more likely to be obese in adulthood.
- Nearly 9% of the total UK burden of disease (measured in DALYS) is due to high BMI.
- The total cost of obesity to the UK economy is estimated at £27bn per year. Costs to the NHS alone are more than £6bn and projected to rise by a further £2bn if the prevalence of obesity continues to rise and more effective but expensive treatments are introduced.

2. Maintaining a healthy body weight: Eating well and being active

Physical activity and healthy eating

Individuals and communities that eat well and are physically active are more likely to maintain a healthy body weight and will accrue many other benefits independent of the positive impact on obesity levels.

- Relatively modest levels of activity are recommended for adults – 150 minutes of moderate intensity physical activity per week.
- But only two-thirds of men and half of women in England get this amount; and levels of activity in Havering are lower still.
- Children and young people aged 5–18 year olds should get at least 60 minutes per day, which should be a mix of moderate intensity (e.g. walking to school) and vigorous intensity aerobic activity (e.g. playing football).
- Under-fives should be active for three hours, spread throughout the day.

- But only 1 in 5 children aged 5 - 15 years and 1 in 10 children aged 2- 4 get the recommended level of activity.

In the United Kingdom, the Scientific Advisory Committee on Nutrition (SACN) publishes recommendations regarding the intake of energy, nutrients and some specific food groups. The potential benefit if everyone met these recommendations would be enormous e.g. more than 10% of deaths avoided and £6billion reduction in NHS expenditure.

- Average adult energy consumption is about 10% more than needed to achieve energy balance – equivalent to 4 chocolate digestives or a can of soft drink too much each day.
- Sugars (1/2) and fats (1/3) account for the majority of energy intake.
- SACN has recommended that free or added sugars should make up no more than 5% of energy intake – equivalent to 7 sugar cubes for adults per day; less for children.
- Only 4% of children and 13% of adults meet the SACN recommendation about free sugars and average consumption by young people is three times the recommended amount.
- Levels of 'healthy' and 'unhealthy' eating vary with age, gender, ethnicity and disadvantage. Very few people with a learning disability eat well.

Healthy nutrition in early life is of crucial importance

- Both maternal under- and over-nutrition around the time of conception and during pregnancy increases the risk of childhood obesity.
- Pregnant women are advised to consume only an additional 200 kcal/day in the last trimester – and definitely not to 'eat for two'.
- Babies that are breastfed are less likely to become obese. But a quarter of babies born in Havering are not breastfed at all, and 6 out of 10 are bottle fed by 6-8 weeks.
- Delaying weaning until babies are at least six months old reduces the likelihood of obesity.

3. The obesity epidemic: the drivers and how we should respond?

Drivers of increasing obesity

Obesity occurs when energy intake from food and drink consumption is greater than energy expenditure through the body's metabolism and physical activity over a prolonged period, resulting in the accumulation of excess body fat.

It is tempting to believe that obesity can be addressed by shifting decisions at the level of the individual. However, humans evolved in a world of relative food scarcity and hard physical work and now live in a world where energy-dense food is abundant and we have access to many labour-saving technologies. As a result, the majority of the population are now predisposed to gaining weight.

Responses to reduce obesity

Therefore, action is needed to address the environmental and societal factors that contribute to 'passive' obesity to assist the individual – who may also benefit from support to initiate

and maintain conscious behaviour change. To maximise the chances of success we must address all the factors driving the obesity epidemic. Taken together, their complementary and reinforcing action may achieve the significant shift in population obesity levels required.

4. Promoting healthy eating and physical activity to prevent obesity: assets and opportunities

What works?

To prevent people becoming obese, and increase levels of physical activity and healthy eating, local partnerships should: -

- reduce the environmental and societal factors that contribute to passive obesity and replace them with 'cues' or 'nudges' for healthier choices.
- work to make more people perceive obesity, healthy eating and physical activity to be issues that affect them personally; prompting them to take up the available opportunities to be more active and eat more healthily.
- focus on early years as weight is difficult to lose once gained and the attitudes and behaviours established in childhood serve to shape our lifestyle in later life.
- seek to remedy the inequalities regarding obesity, physical activity and diet that affect specific communities and population groups.

Shaping the physical activity environment to create safe and attractive environments where everyone can walk or cycle, regardless of age or disability

Creating 'healthy streets'

For many people, walking, whether for pleasure or travel purposes, represents the most likely sustainable form of physical activity. Residents are more likely to walk when commonly used amenities are relatively close by and the street scene is 'inviting'.

The Council fosters ever healthier streets in a variety of ways e.g. through

- structural improvements to the street scene,
- high standards of street cleaning and maintenance,
- using spatial planning to ensure new housing is well served by public transport and has a range of high quality amenities in walking distance,
- encouraging new enterprises to locate to local centres, etc.

Improving the public transport offer in the borough

A quarter of Londoners already get their recommended daily physical activity as part of a longer commute by public transport. But Havering has the lowest percentage of commuting by public transport of any London borough. Havering also has the 2nd lowest Public Transport Accessibility Levels (PTALS) of any borough in the capital. Improving access to public transport would boost levels of physical activity as well as contribute to a range of other priorities.

The Council and TfL have a number of priorities for public transport including:

- Romford Station – improvements with Crossrail
- New station at Beam Park to serve London Riverside area
- Rainham regeneration
- Improved north-south bus links and better links between hospitals

Maintaining and improving access to high quality green space

Parks and green spaces provide safe and attractive spaces in which to walk, cycle and play. Access to good quality green space is associated with a range of positive health outcomes including lower levels of overweight and obesity.

Havering as a whole has a large number of parks and open spaces, which make it one of the greenest boroughs in the capital. The borough contains a number of nature reserves, including an area of Special Scientific Interest. The majority of residents have good access to playgrounds and outdoor gym facilities.

Improving the 'cyclability' of Havering

Cycling improves cardiovascular health, is kind to joints and is associated with increased longevity. However, relatively few people in Havering cycle compared with other London boroughs. Since 2012, Havering has been a 'Biking Borough' and is actively addressing barriers to cycling.

[Considerable activity](#) is underway to increase rates, supported by £600K funding from TfL including the development of dedicated cycleways and 'greenways', regular bike security marking events, organises 'led' rides around the area, as well as a variety of riding and maintenance courses. The cycle to work scheme assists employees to buying a bike.

Road design

Actual and/or perceived safety influences decisions about whether individuals choose to walk or cycle or whether parents allow their children to do so. Good road design, including the use of 20mph limits in priority areas, reduces the likelihood of accidents and their severity should they occur.

Shaping the food environment to promote healthy eating

Central to tackling obesity and other diet-related poor health outcomes is creating an environment where it is normal, easy and enjoyable to eat healthily.

While reducing intake of saturated fat, sugar and salt and increasing intake of fruit, vegetables, dietary fibre and oily fish remain central to promoting a balanced diet, much of the current policy focus is targeted at reducing sugar intake.

Environmental variables that have an influence on eating patterns can be grouped into four overlapping areas:

- Community nutrition environment (type, location and accessibility of food outlets);
- Organisational nutrition environment (home, school, work and other settings);

- Consumer nutrition environment (availability, cost and promotion or placement of healthy options);
- Information environment (media and advertising).

Shaping the community environment (type, location and accessibility of food outlets)

Food businesses are an essential part of a vibrant, healthy and prosperous high street. However, a balance needs to be struck between commerce and health. Too many fast food outlets selling cheap, energy-dense, nutrient-poor foods, served in larger portion sizes, is detrimental to the health of local communities.

Analysis by PHE demonstrates that fast food outlets are concentrated in disadvantaged communities thereby contributing to local health inequalities. The same analysis demonstrates that Havering, although not particularly disadvantaged, has a relatively high concentration of fast food restaurants, in common with many other London boroughs.

The National Planning Policy Framework (NPPF) makes clear that local planning authorities (LPAs) have a responsibility to promote healthy communities. To this end, local plans should 'take account of and support local strategies to improve health, social and cultural wellbeing for all'.

Both NICE and PHE recommend that planning authorities restrict planning permission for takeaways and other food retail outlets in specific areas for example, within walking distance of schools. Given that Havering already has a relatively high number of fast food outlets; schools should also consider more direct action e.g. restricting pupils to school premises at lunchtime.

Organisational nutrition environment (home, school, work and other settings)

Large sections of the population rely on others to buy, prepare and serve food on their behalf for a significant number of their meals e.g. children and young people in pre-schools, schools and colleges, patients in health care settings and people in residential care. For some people, this may be all the food that they eat. These individuals rely on the providers of their food to plan menus in such a way that it is possible for them to meet dietary recommendations.

Using food and nutrient-based standards as a framework on which to base menus will help to ensure that people can achieve dietary recommendations. A much larger proportion of the population would benefit if the food in workplaces was also guided by these principles.

Consumer nutrition environment (availability, cost and promotion or placement of healthy options)

The previous government initiated the public health responsibility deal to encourage the food and drink industry to work with it to improve health as opposed to legislating to enforce change.

The responsibility deal included a calorie reduction pledge to provide a mechanism for the food and drink industry to make and record its contribution to reducing the population's energy intake and 43 manufacturers have done so.

PHE, in their analysis of how intake of sugar might best be reduced, advocates for many of the interventions voluntarily put in place via the responsibility deal (e.g. reformulation of products to reduce sugar content). However, PHE recommends that such approaches should be adopted industry wide thereby undermining the voluntary approach behind the public health responsibility. Moreover, PHE has also stated that financial measures e.g. a sugar tax would be effective.

Campaigners have sought to demonstrate to central Government that such measures would be publically acceptable e.g. by placing a self-imposed levy of 10p to the price of soft drinks with added sugar to heighten consumer awareness of hidden sugars.

Information environment (media and advertising)

The available research evidence shows that all forms of marketing consistently influence food preference, choice and purchasing in children and adults.

PHE recommends that Government should set a clear definition for high sugar foods and thereafter take action to significantly reduce opportunities to market and advertise high sugar food and drink products to children and adults across all media including digital platforms and through sponsorship.

PHE recommends that campaigns such as Change4life should be continued to raise awareness of concerns around sugar levels in the diet, encourage action to reduce intakes and provide practical steps to help people lower their own and their families' sugar intake.

Creating a healthy community

Leadership and 'walking the walk'

The Health and Wellbeing Board is ideally placed to provide strategic leadership; the adoption of a strategy to tackle obesity is an essential first step.

More importantly, public sector agencies must then demonstrate to their staff, clients, patients, Council Tax payers, etc. that they take health seriously. If not, they will undermine their own efforts to motivate individuals to change and adopt healthier lifestyles.

Key opportunities to 'walk the walk' include:

- putting in place a high quality healthy workplace offer.
- active participation in national health improvement campaigns.
- ensuring health professionals, the wider public sector workforce and the premises they work from actively promote healthy choices.
- ensuring all corporate decisions are assessed for health impacts.
- recognising and fostering the contribution of the community and voluntary sector.

- engaging the business community in health improvement.

Healthy working places

Every employer has a vested interest in ensuring the good health of its workforce so sickness absence is minimised and service delivery improved. Obese employees have more and longer sickness absences than workers of a healthy weight. Effective healthy workplace schemes in the statutory sector would benefit a significant minority of households in Havering given that a high proportion of Council and NHS employees are local residents.

The [London Healthy Workplace Charter](#) is a self-assessment framework that recognises employers for investing in workplace health. It provides a series of standards for workplaces to meet in order to guide them to creating a health-enhancing workplace. London Borough of Havering reached the 'Achievement' standard in 2014.

Ensuring public sector premises support healthy choices

Nudge theory suggests that the available options can be presented in such a way as to favour a desired outcome whilst preserving the individual's ability to choose. Nudges may vary from simple promotion of healthy options e.g. sign posting the stairs as opposed to the lift or putting fruit by the checkout as opposed to confectionary to more direct incentives (e.g. making healthy food options noticeably cheaper than less healthy ones). A periodic audit of the environment in which statutory sector services are provided to identify opportunities to nudge in favour of healthier options would add value and ensure that health improvement messages are not unintentionally undermined.

Enlisting the wider workforce to promote healthy choices

The Making Every Contact Count (MECC) concept draws on the established role of health professionals, particularly in primary care, who provide opportunistic brief advice to patients about lifestyle related issues. There is good evidence that such advice has a small but measurable impact on the behaviour of patients e.g. provision of brief advice about smoking by a doctor produces 1 additional quitter for somewhere between every 33 to 80 patients offered advice. The national aspiration is to extend this approach to all NHS staff, clinical and administrative; in primary care, community and acute hospitals settings.

The Council has developed a 'health champion' scheme called ['my health matters'](#) which fits with the MECC concept. Tapestry, a local VCS provider has been commissioned to recruit and thereafter manage a network of community health champions drawn from employees and residents.

Health impact assessment of corporate decisions

A complex array of factors has an impact on obesity levels. As a result, it may be difficult to identify which decisions, and by whom, will or won't impact on obesity levels, still less on health in the round. Health impact assessment (HIA) is a process whereby significant decisions by public sector agencies could be reviewed to identify potential health impacts so that potential benefits can be maximised and potential harms mitigated. A light touch HIA

process, analogous to the existing Equality Impact Assessment process, would over time work to ensure that the collective decisions of the public bodies improve health.

The community and voluntary sector contribution

Community groups can drive health improvement in many ways. Most obviously in the context of obesity prevention, a huge range of sports and active leisure options are provided by third sector organisations. The Council and other public bodies should continue to support the community and voluntary sector to support residents to live more healthily.

Engaging the business sector

The local business sector has huge resources, energy and innovation. Yet this analysis has identified very little positive input to healthy living in the borough – beyond the obvious employment opportunities provided and income resulting which are crucial determinants of health.

More research may identify a greater contribution. Either way, more consideration should be given to how the private sector could be involved e.g. involvement in campaigns, healthy workplace schemes etc.

Supporting individuals to change

Health improvement campaigns

Effective campaigns have a role to play in changing attitudes with the ultimate aim of changing social norms such that the healthy choice becomes the usual choice for the majority. National bodies, primarily Public Health England have developed a number of increasingly sophisticated and successful campaigns such as Change4Life '10 Minute Shake Up' campaign with Disney; 'Couch to 5K' and 'sugar smart'.

Local agencies have neither the resources or expertise to develop similar campaigns but we can seek to amplify the message and use it to promote relevant local resources e.g. the Council's Sport Development Team badged programmes of activity for women and girls under the 'this girl can' banner to tie in the Sport England campaign. Campaigns should be coordinated across the partnership and linked to the 'MECC' activity of health care workers and health champions everywhere.

NHS Health checks

NHS health checks are one of the Council's mandated public health responsibilities. As part of a holistic assessment of cardiovascular risk, they are an opportunity to periodically advise ostensibly healthy adults aged 40 – 74 years about the benefits of maintaining a healthy bodyweight and signposting to sources of support and advice that might help them do so.

Weight management services and clinical interventions

Lifestyle weight management programmes and health care interventions form part of the overall care pathway for obese people.

- The Council is responsible for tiers 1 and 2, including population level interventions to encourage healthy eating and physical activity, as well as lifestyle related weight management services
- The Clinical Commissioning Group is responsible for tier 3, clinician-led specialist multidisciplinary teams
- NHS England is responsible for commissioning tier 4 services, including bariatric surgery

What is provided is a local decision, reflecting the local priorities and resource constraints
The bulk of this assessment has described activity that could broadly be categorised as **tier 1**.

Tier 2 lifestyle weight management programmes are multi-component programmes that aim to reduce a person's energy intake and help them to be more physically active by changing their behaviour.

NICE recommends that adults who are obese, that is with a BMI over 30 kg/m², or lower for those from black and minority ethnic groups or with other risk factors e.g. comorbidities such as type 2 diabetes may benefit.

The expected outcomes from an effective programme include completion by at least 60% of participants, resulting in an average weight loss of 3% or more, with at least 30% of participants losing 5% or more of their initial weight. Weight losses of between 5 and 10% in overweight and obese individuals with type 2 diabetes have been associated with significant improvements in CVD risk factors at 1 year; but those with larger weight losses benefit more. Services achieving modest weight loss are cost effective if that weight loss is maintained for life. There is a lack of evidence that this is the case – hence tier 2 services commissioned by the public sector are only probably effective / cost effective and unlikely to be harmful. The same can be said for a number of commercial weight management programmes.

Tier 3 obesity service is for obese individuals (usually with a body mass index of 35 and over with co-morbidities or 40 and over with or without co-morbidities) who have not responded to previous tier interventions; comprising a multi-disciplinary team of specialists, typically including: a physician specialist nurse; specialist dietician; psychologist or psychiatrist; and physiotherapist/physical activity specialist. Patients may respond well to intense support from tier 3 services and lose significant weight; they are also essential in preparing patients for bariatric surgery.

Tier 4 services provide bariatric surgery – a highly specialised intervention, offered to carefully selected patients with severe and complex obesity that have not responded to all other non-invasive therapies. In such patients, it is effective and cost effective, i.e. significant weight loss results; health outcomes improve and hence the overall cost of care is reduced such that within 2 – 3 years the initial cost of surgery is offset. Very small numbers of patients undergo bariatric surgery – as is the case nationally.

The obesity pathway in Havering needs to be clarified. Tier 2 services are currently not commissioned and information about reliable self-help aids and effective commercial providers have not been collated. Tier 3 services have not been commissioned. The tier 4 provider is supporting prospective bariatric surgery candidates but a local service would be more convenient. Likewise, the support available to children and young people with weight problems and their families also needs clarification and agreement.

Giving children and young people the best start

There are numerous reasons why children and young people should be our priority over and above the obvious moral obligation to protect the vulnerable; not least because losing weight in later life is difficult; and experiences in early life, indeed before birth, predispose individuals to obesity in adulthood.

As with obesity in general, there is no single silver bullet to the problem of childhood obesity. There are numerous opportunities to intervene, many of which would benefit parents and the wider community.

- Support to obese women pre-conception and during pregnancy would reduce foetal programming – which predisposes their offspring to obesity in later life.
- The promotion of breast feeding and healthy weaning is crucially important in reducing the likelihood of excessive weight gain during the early years and establishing preferences for healthier foods.
- Midwives, health visitors and children's centre staff have a potentially crucial role if adequately resourced and trained to identify at risk women / infants; and offer effective support to change unhealthy behaviours.
- Action to assisting parents with the knowledge and skills necessary to cook healthily may help. As would support and guidance to nurseries and childminders who assume direct control of the child's diet and activity for significant periods.
- Schools have enormous potential; providing children with a healthy environment and assisting them to make healthier choices. The curriculum offers opportunities for children to learn practical cooking skills; be active for significant periods and develop the knowledge and attitudes that underpin healthy living in adulthood. Extensive assets, developed over a long period, relevant to sport and PE are evident in the borough; the same can't be said with regard to diet and cooking skills.
- The healthy schools award programme has been well received and has motivated a large number of schools to systematically review their contribution to the health of their pupils and how it can be improved; action regarding healthy eating and physical activity is a particular focus.
- School meals are of a consistently high standard; further work is needed to encourage still greater uptake and assist children to make healthy choices from the available menu.
- School transport plans can increase levels of physical activity – for children and parents – and reduce congestion around schools.
- The National Child Measurement Programme, carried out in schools, is an opportunity to raise awareness and prompt action by parents.

- The views of peers can be particularly important to children and young people and we should consider how we involve young people in improving their own health. Youth health champions are one possibility.

Tackling Inequalities in obesity

There are very significant inequalities in the prevalence of obesity between communities and population groups. Focusing on the early years is crucial to narrowing inequalities in obesity. As stated by Marmot, "*Giving every child the best start in life is crucial to reducing health inequalities across the life course. (We need) to increase the proportion of overall expenditure allocated to early years, and it should be focused proportionately across the social gradient to ensure effective support to parents, starting in pregnancy and continuing through the transition of the child into primary school.*"

Health visitors, working with early years staff, are uniquely placed to support with the transition to parenthood; breastfeeding and healthy weaning which are crucial to the prevention of childhood obesity during the early years. Strengthening Havering's under resourced health visiting team should be a priority.

Residents with a learning disability appear particularly vulnerable to obesity, poor diet and sedentary lifestyles. Further work with professionals, carers and people with learning disability is needed to identify opportunities for improvement.

Next Steps

This needs assessment has been undertaken to inform development of an obesity prevention strategy requested by the Havering Health and Wellbeing Board. Therefore, a strategy and action plan, and systems to effectively coordinate and report on progress are essential first steps. The content must be decided on by the Health and Wellbeing Board, having considered the evidence presented here, but also the wider priorities of the Board and its constituent bodies, and the resources available to support delivery, both financial and human. This assessment suggests 3 broad streams of work:

- Shaping the environment to promote healthy eating and physical activity
- Supporting a culture that sees physical activity and healthy eating as the norm
- Prompting individuals to change, primarily through self-help.

A focus on children and young people – particularly the early years is essential, both to reduce levels of obesity amongst children – but also tackle the significant inequalities associated with social disadvantage.

Key opportunities to tackle obesity are within the gift of central Government rather than local partners e.g. regulation of the food industry. Local partners should take any opportunities that arise to encourage central Government to take effective action.

Introduction

This needs assessment has been produced to inform the development of an obesity prevention strategy requested by the Havering Health and Wellbeing Board.

It is structured as follows:

- Section 1 sets out the case for tackling obesity;
- Section 2 describes what we know about levels of healthy eating and physical activity and their benefits, including maintenance of a healthy body weight;
- Section 3 outlines the factors behind the increase in obesity levels and how they might be addressed;
- Section 4 describes existing activities and assets but also gaps in current provision relevant to each of the priorities suggested;
- Concluding with next steps

Figure 1: Summary of Contents



1. The case for tackling obesity: why is it an issue?

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Trend

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Trend

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Definition
Prevalence

4. Inequalities in obesity

Age and Gender
Ethnicity
Long term illness and/or disability
Deprivation

5. Harmful Effects

Health Impact
Financial Burden

HAVERING





J S N A

1.1 Adult Obesity

1.1.1 Definition

Overweight and obesity is excessive fat accumulation that may impair health¹. There are various ways of measuring obesity levels. The most commonly used measure is Body Mass Index (BMI) calculated by dividing body weight (kilograms) by height (metres) squared. See Table 1 for how BMI is classified.

Table 1: The classification of Body Mass Index (BMI)

BODY WEIGHT CATEGORY		BMI RANGE (kg/m ²)
	Healthy weight	from 18.5 to 25
	Overweight	from 25 to 30
	Obese Class I (Moderately obese)	from 30 to 35
	Obese Class II (Severely obese)	from 35 to 40
	Obese Class III (Very severely / morbidly obese)	over 40

Data Source: Health Survey for England, 2013

The National Institute for Health and Care Excellence (NICE) has concluded that people from Black, Asian and other minority ethnic groups (BME) are at an increased risk of ill-health at lower BMI levels than the White European population². As a result, NICE recommends that lower thresholds for action should be employed for these communities. Hence, ethnic specific thresholds may be employed (see 0).

BMI measurements are simple to collect and easy to interpret and hence are widely used to categorise levels of obesity and monitor trends over time. However, BMI does not distinguish between mass due to body fat and mass due to muscular physique, or for the distribution of

fat. Therefore, waist circumference is also a widely recognised measure used to identify those at particular risk of ill health from being overweight.

NICE guidelines³ on prevention, identification, assessment and management of overweight and obesity state that the risk of health problems should be identified using both BMI and waist circumference for those with a BMI less than 35kg/m². For adults with a BMI of 35kg/m² or more, risks are assumed to be very high with any waist circumference. For men, low waist circumference in this classification is defined as less than 94cm, high waist circumference as 94–102cm, and very high as greater than 102cm. For women, low waist circumference is less than 80cm, high is 80–88cm and very high is greater than 88cm. See Table 2 for a simple tabular summary and for more information about the measurement of obesity in adults, see http://www.noo.org.uk/NOO_about_obesity/measurement.

Table 2: NICE risk categories based on BMI and waist circumference

BMI classification	Waist circumference		
	Low	High	Very high
Normal weight (18.5 to less than 25kg/m ²)	No increased risk	No increased risk	Increased risk
Overweight (25 to less than 30kg/m ²)	No increased risk	Increased risk	High risk
Obesity I (30 to less than 35kg/m ²)	Increased risk	High risk	Very high risk
Obesity II (35 to less than 40kg/m ²)	Very high risk	Very high risk	Very high risk
Obesity III (40kg/m ² or more)	Very high risk	Very high risk	Very high risk

Data Source: Household Survey for England (HSE), 2013

1.1.2 Prevalence

The Health Survey for England (HSE) has been the definitive source of information regarding the prevalence of obesity at national level for many years. The most recent data was collected in 2014 and published in 2015¹. Based on direct measurement of 7,000 subjects, just under two-third of adults in England had a BMI classified as overweight or obese; more than a quarter were in the obese category.

More than ¼ of adults are obese; 2/3rd are overweight or obese.

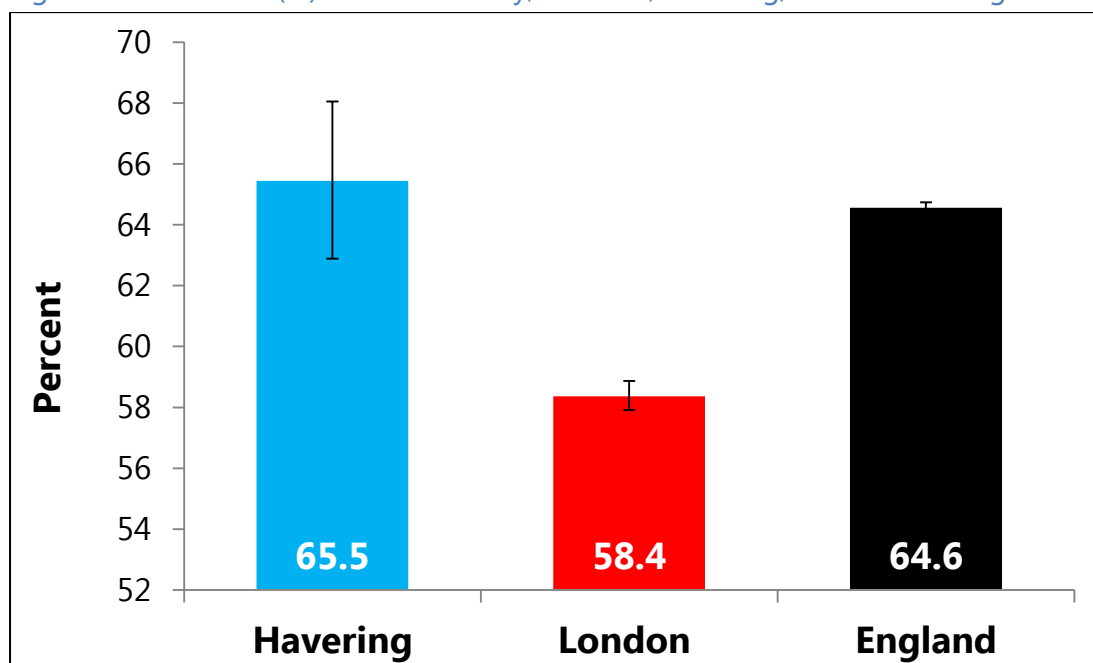
Table 3: Overweight and obesity prevalence (%), adults, England, 2014

	Overweight, including obese	Obese	Morbidly obese
Men	65	24	2
Women	58	27	4
People	62	26	3

Data Source: Household Survey for England (HSE), 2014

Similarly, but based on self-reported height and weight measurements, Public Health England (PHE) report that 65.6% of Havering adults were overweight or obese during the period 2012-14²; close to the national average (64.6%) but significantly higher than the London average (58.4%) – Figure 2.

Figure 2: Prevalence (%) of adult obesity, 2012-14, Havering, London and England



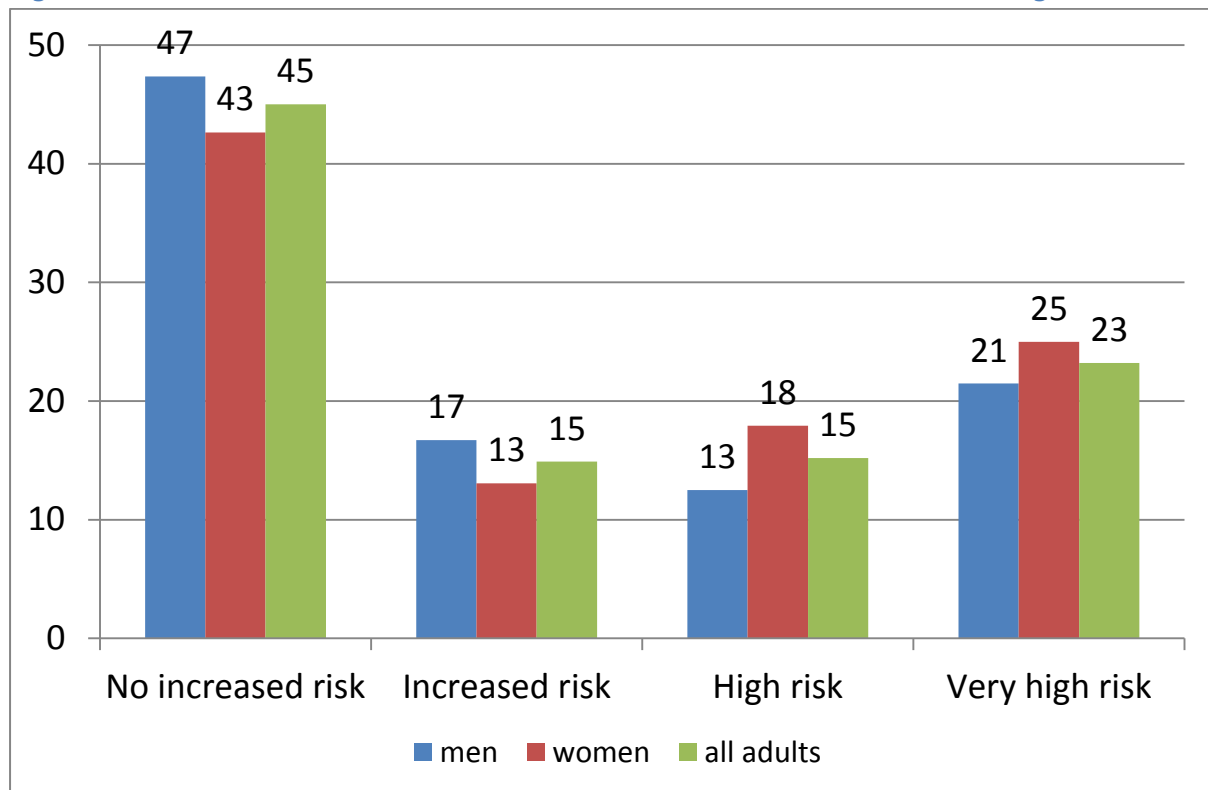
Data Source: Public Health Outcomes Framework (PHOF), 2015.

¹ [Health Survey for England, 2014.](#)

² [Public Health Outcomes Framework – 2.12 Excess weight in adults.](#) Accessed October 2015.

Likewise data held by Havering General Practices (GPs) also suggest that 2 out of every 3 adults (110,000 people) are overweight or obese; 5,700 (2.7%) are severely obese with a BMI >40³. HSE demonstrates that 4 out of every 10 adults nationally have a 'very high' waist circumference⁴. Using the combined BMI and waist circumference health risk categorisation recommended by NICE, more than half of adults in England are at increased risk of ill health, almost a quarter are at very high risk (see Figure 3).

Figure 3: Risk of ill health associated with BMI & waist circumference, adults, England, 2014



Data Source: Health Survey for England (HSE), 2014

³ LBH PHS analysis of Health Analytics 2015 data.

⁴ [Health Survey for England, 2014.](#)

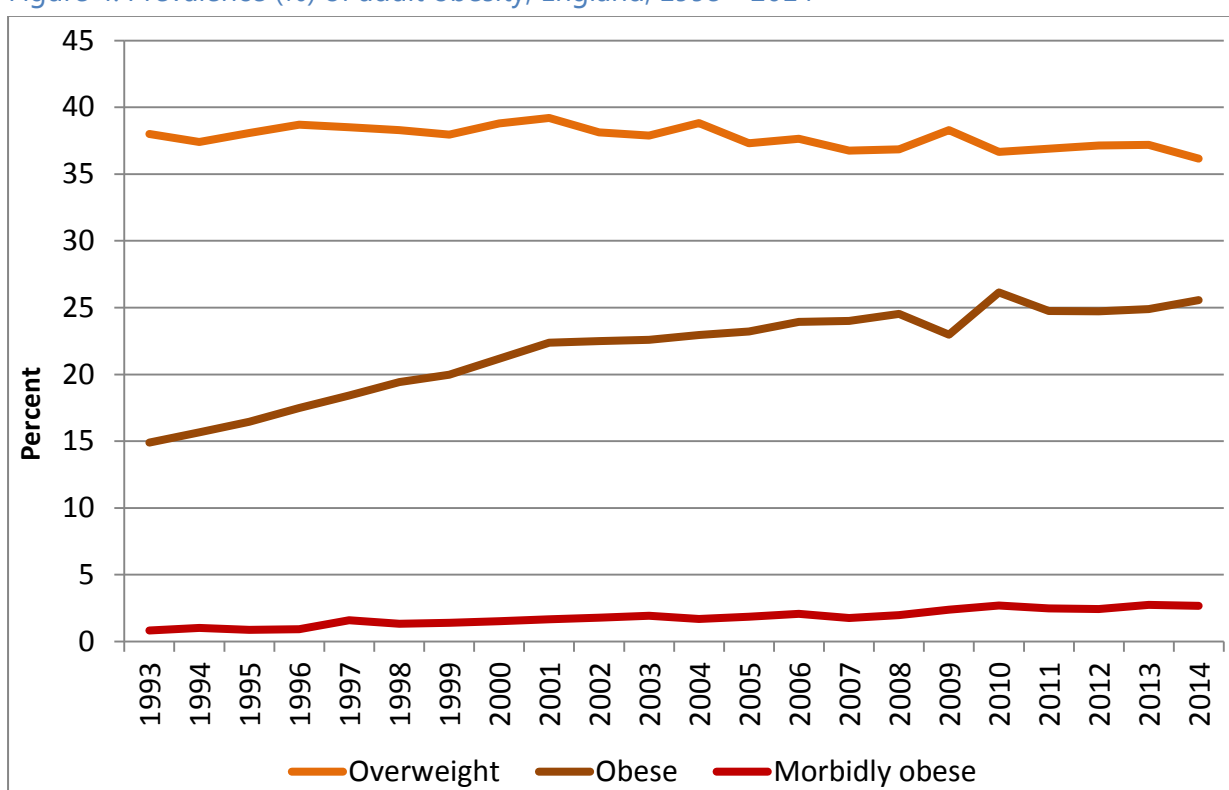
1.1.3 Trend

Data regarding trends in adult obesity are currently not available at local level. Data from the Health Survey for England⁵ show that the prevalence of obesity increased from 15% in 1993 to 26% in 2014 and the percentage with a healthy body weight decreased by a similar proportion (see Figure 4).

However, it does appear that the rate of increase has slowed if not plateaued since 2008/9. Levels of morbid obesity (the most severe category of obesity) have more than doubled since 1993, to 2.7% of adults in 2014, with little sign of any reduction in the rate of increase.

Levels of adult obesity have risen steadily over the last 20 years and are expected to rise still further - unless effective action is taken now.

Figure 4: Prevalence (%) of adult obesity, England, 1993 - 2014



Data Source: Health Survey for England (HSE), 2014

The prevalence of obesity and overweight in adults is predicted to increase still further – to 70% of adults in England by 2034⁴.

⁵ [Health Survey for England - 2014, Trend tables](#)

1.2 Childhood Obesity

Childhood obesity is one of the most serious global public health challenges for the 21st century

1.2.1 Definition

The World Health Organisation (WHO) regards childhood obesity as one of the most serious global public health challenges for the 21st century as obese children are at an increased risk of developing health problems, and more likely to become obese adults⁶.

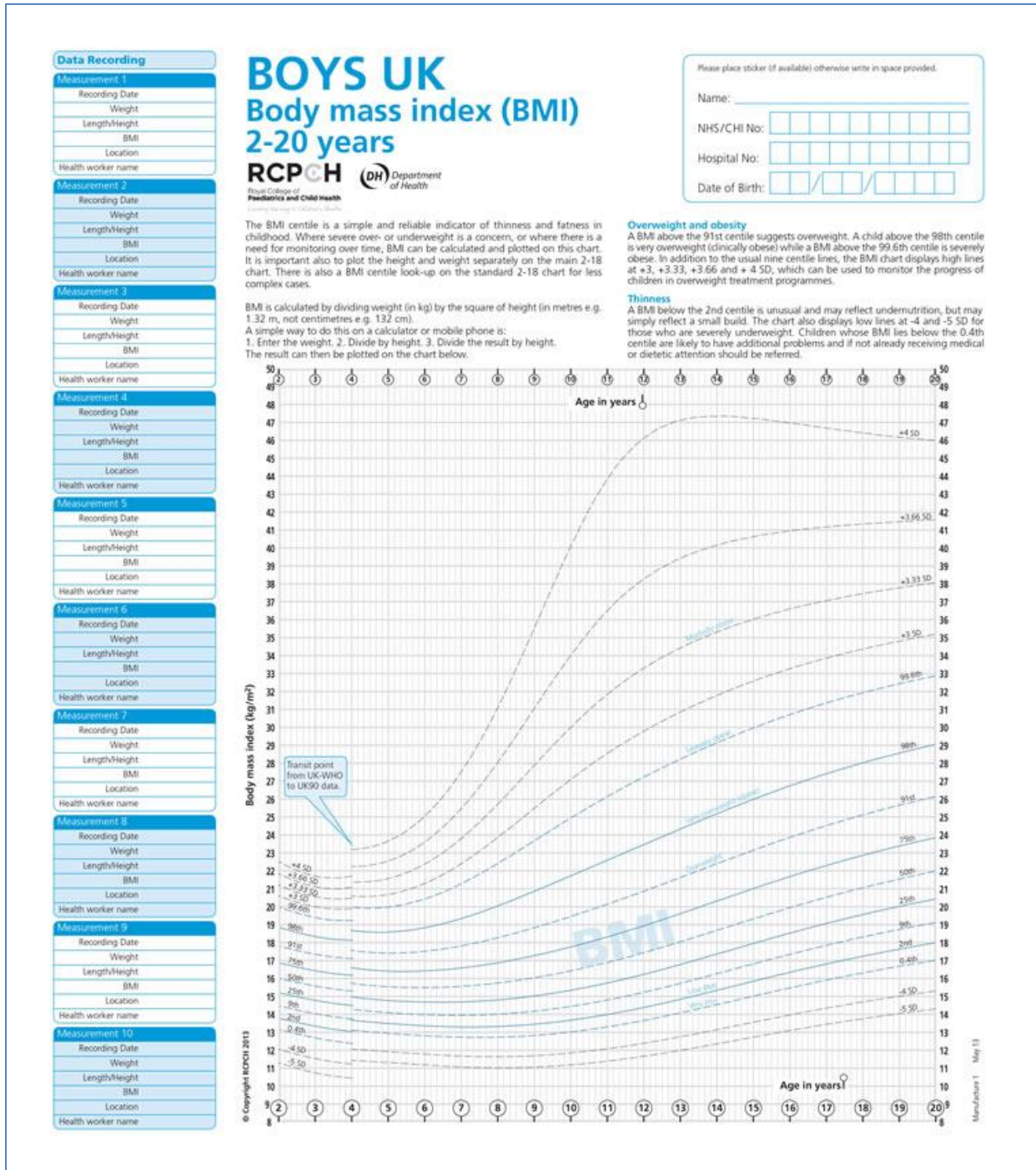
How is childhood obesity measured?

A child's BMI changes as children mature and growth patterns differ markedly between boys and girls. To reflect this, children's BMI is categorised using variable thresholds that take into account their age and gender. These thresholds are calculated by weighing and measuring a large sample of children to identify how BMI varies by age and sex across the population. The sample population needs to be similar to the population being assessed and in England comparisons are usually made against the '1990 growth reference' (aka UK90). For the purposes of monitoring the prevalence of obesity in the population as a whole, children with a BMI equal to or greater than 85% of the reference sample (the 85th centile) are categorised as overweight and those with a BMI equivalent to the 95th centile are categorised as obese.

Note that higher thresholds (91st and 98th centiles for overweight and obese respectively) are used by health professionals to identify and monitor individual children whose weight may be of concern. See ['A simple guide to classifying body mass index in children'](#) for further information.

⁶ <http://www.who.int/dietphysicalactivity/childhood/en/>

Figure 5: Body Mass Index chart



Data Source: Royal College of Paediatrics and Child Health

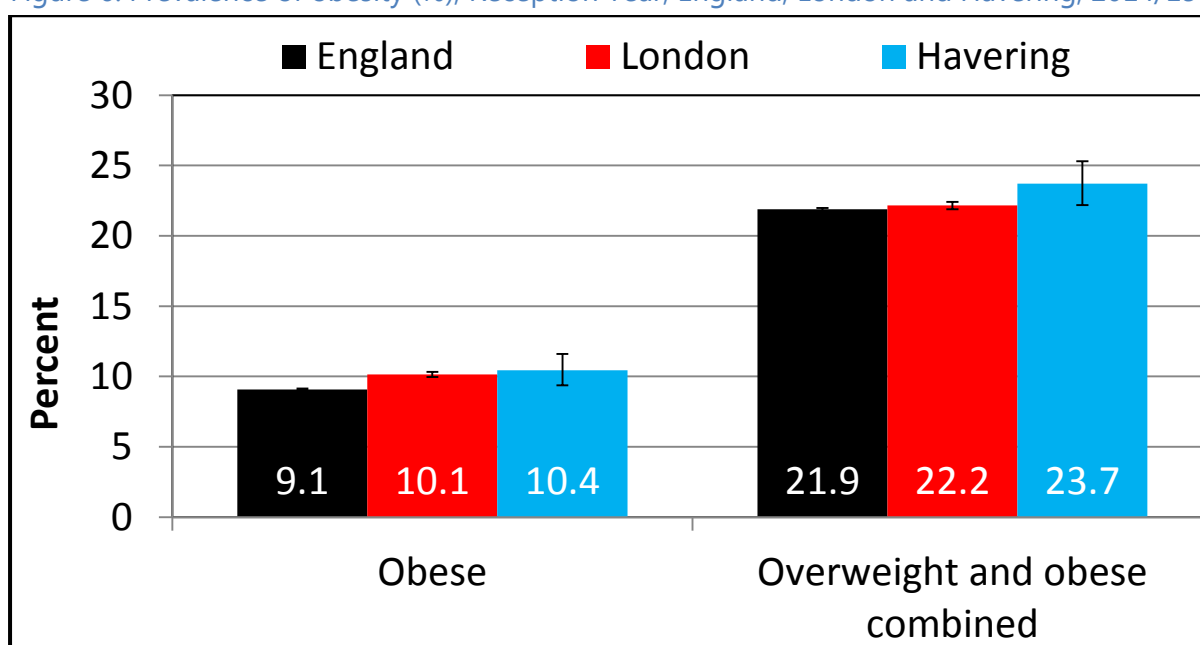
1.2.2 Prevalence

The National Child Measurement Programme (NCMP) was initiated in 2006/7 to measure the height and weight of children in reception class (aged 4 to 5 years) and year 6 (aged 10 to 11 years). Following the transfer of public health responsibilities to local government in April 2013, local authorities have been under a legal obligation to ensure the NCMP programme is undertaken in all state maintained schools within their area. Participation in the programme is not compulsory, but non-participation is on an opt-out basis and coverage is high. Children's heights and weights are measured and used to calculate a Body Mass Index (BMI) centile. The measurement process is overseen by trained healthcare professionals in schools. Data are submitted to the Health and Social Care Information Centre (HSCIC) which collates and validates all data centrally before publication. As a result of the NCMP (see National Child Measurement Programme (NCMP)) for more information about the NCMP we have high quality, up-to-date information about the prevalence of childhood obesity at local authority level.

*1 in 10 children in Havering are obese by the time they start primary school;
1 in 5 children are obese by the time they leave.*

In 2014/15, 1 in 10 Havering children (n = 290) in Reception Year (age 4-5) were obese; almost a quarter (680) were overweight or obese.⁷ Levels of overweight and obesity amongst Reception Year children resident in Havering were similar to those in London but significantly higher than the national average (see Figure 6). Figure 7 presents the levels among Year 6 children resident in Havering compared to London and England.

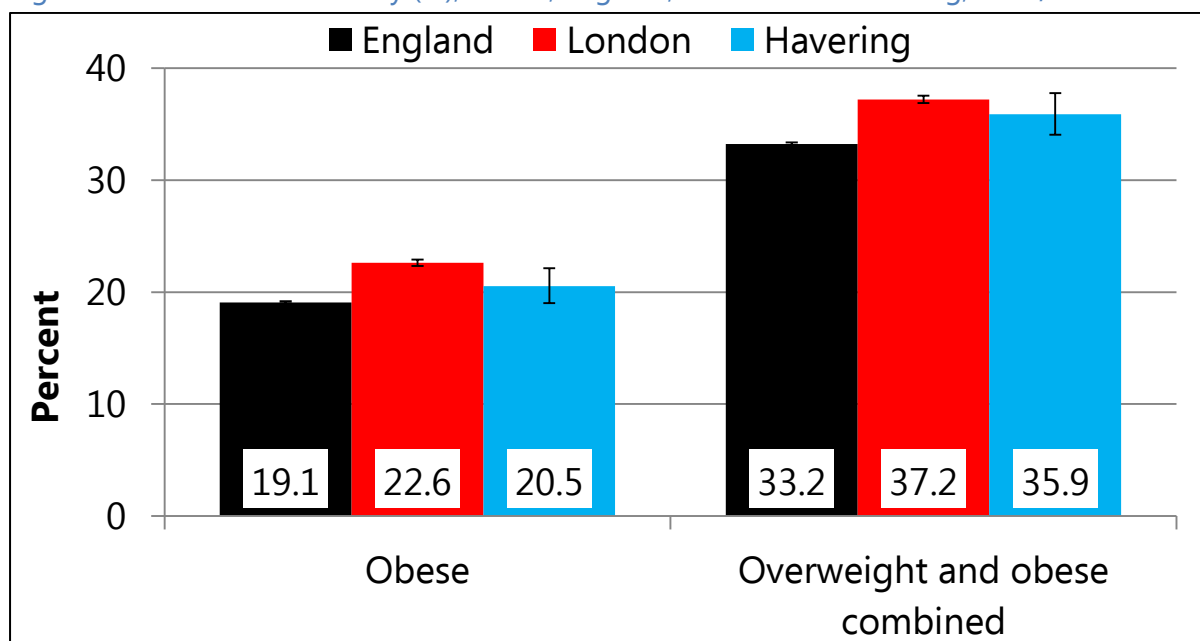
Figure 6: Prevalence of obesity (%), Reception Year; England, London and Havering, 2014/15



Data Source: National Child Measurement Programme (NCMP), 2014/15

⁷[National Child Measurement Programme - England, 2014-15](#)

Figure 7: Prevalence of obesity (%); Year 6; England, London and Havering; 2014/15



Data Source: National Child Measurement Programme (NCMP) 2014/15

International data suggest that children suffering from severe obesity are at increased risk of ill health and are more likely to suffer from severe obesity in adulthood^{5,6}. The NCMP does not publish information regarding the prevalence of severe childhood obesity. However Ells et al. recently proposed centile based definitions of severe childhood obesity equating to adult BMIs of 35kg/m² and 40kg/m² respectively and calculated the percentage of children exceeding these levels using national NCMP data collected from 2006/7 – 2011/12 (see Table 4)⁷.

Table 4: Prevalence (%) of severe obesity by UK90 proposed definitions, England, 2006 - 2012

	Adult BMI equivalent	Boys		Girls	
		Reception	Year 6	Reception	Year 6
≥99.87th centile UK90	35 kg/m ²	1.6%	1.5%	1.2%	1.1%
≥99.98th centile UK90	40 kg/m ²	0.7%	0.2%	0.5%	0.2%

Data Source: Adapted from Ells et al.

Assuming the prevalence of severe childhood obesity in Havering is similar to the national average reported by Ells et al., it's likely that between 70 and 80 children in each primary school year are severely obese.

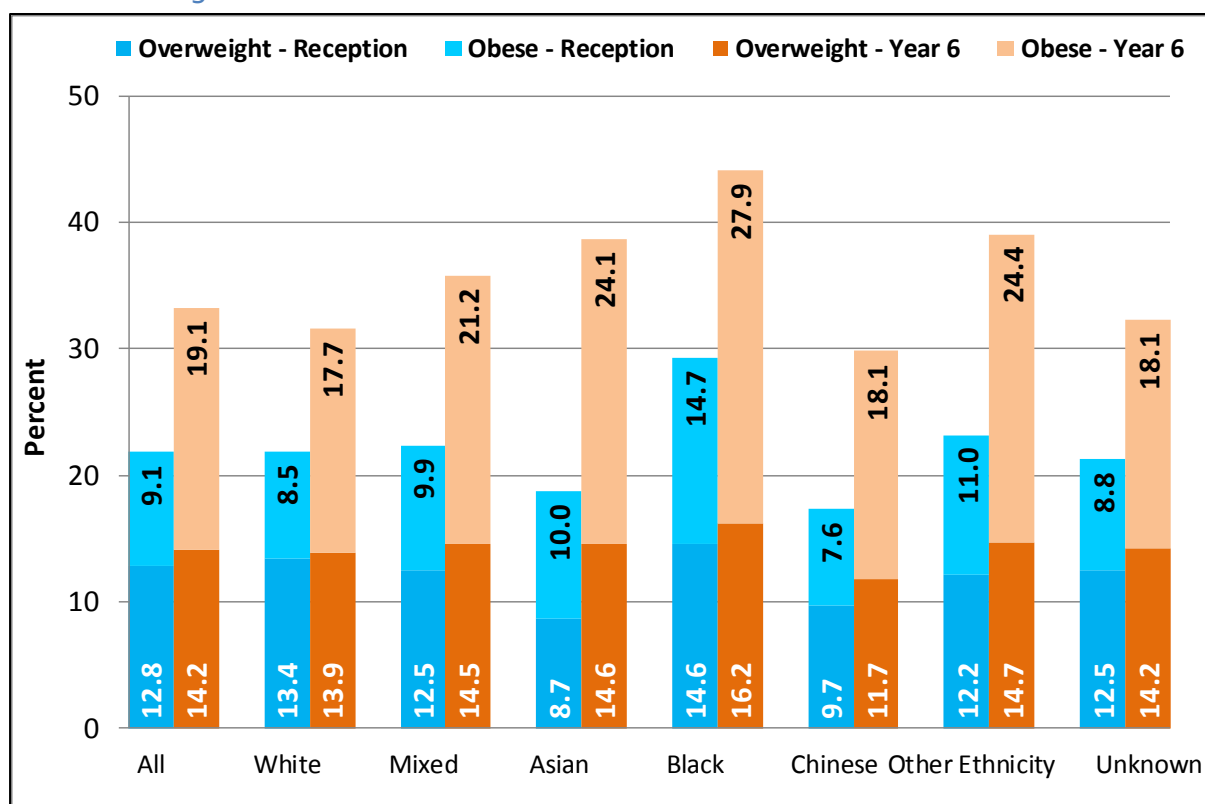
The Health Survey for England (HSE) also reports on levels of childhood obesity in England as a whole. In 2014/15, 17.1% of children aged 2 – 15 years were obese; 31.2% were either overweight or obese.

By ethnicity

Data from the NCMP about obesity levels for different ethnic groups are published for England as a whole but not at local authority level. The data demonstrate significant differences in the prevalence of obesity between ethnic groups.

At both reception and Year 6, children in all but the 'White' and 'Chinese' ethnic groups have significantly higher prevalence of obesity than the average for 'All' children. The prevalence is particularly high amongst 'Black' children (Figure 8).

Figure 8: Prevalence (%) of overweight and obesity by ethnic group*, children in Reception and Year 6, England, 2014/15



Data Source: National Child Measurement Programme (NCMP), 2014/15

*The ethnic groups used for this analysis were derived by combining the following NHS ethnic categories:

White: White British, White Irish, White Any other White background;

Mixed: Mixed White and Black Caribbean, Mixed White and Black African, Mixed White and Asian, Mixed Any other mixed background;

Asian or Asian British: Asian and Asian British Indian, Asian and Asian British Pakistani, Asian and Asian British Bangladeshi, Asian and Asian British Any other Asian background;

Black or Black British: Black or Black British Caribbean, Black or Black British African, Black or Black British Any other Black background;

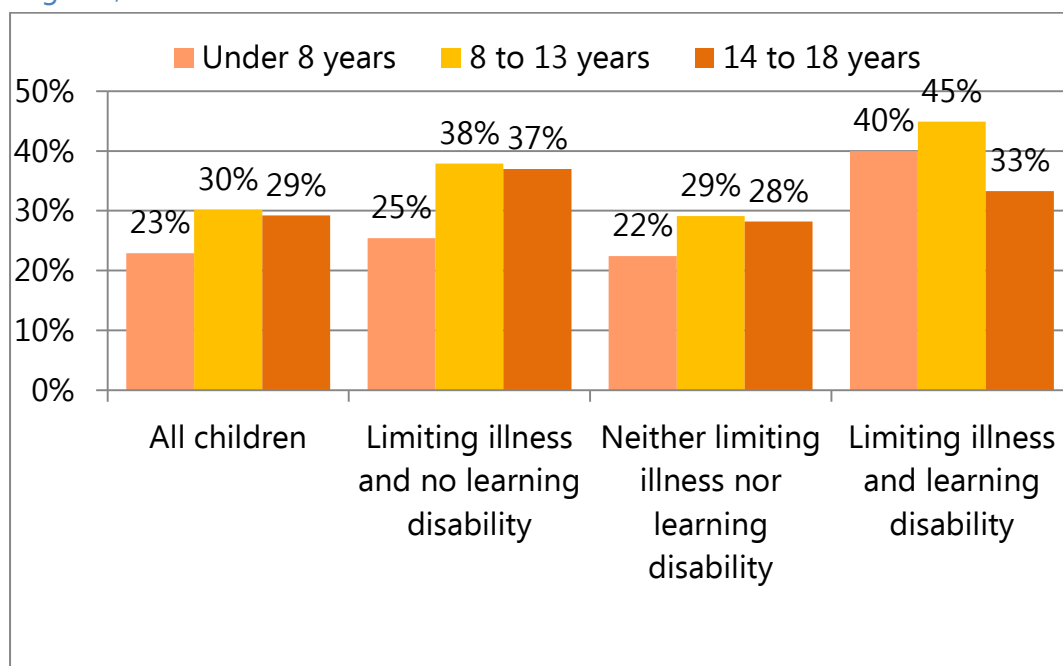
Chinese: Chinese

Disability

Guidance regarding the conduct of the National Child Measurement Programme recommends that children who are unable to stand unaided are excluded.

The National Child and Maternal Intelligence Network (formerly CHIMAT) sought to provide data regarding this potentially vulnerable group by analysing data collected as part of the Health Survey for England in successive years between 2004 and 2008⁸. They found that children who have a limiting illness are more likely to be obese or overweight, particularly if they also have a learning disability – children with both conditions were almost twice as likely to be overweight or obese as children with neither (see Figure 9).

Figure 9: Prevalence (%) of obesity; children with a limiting illness or learning disability; England, 2004 - 2008



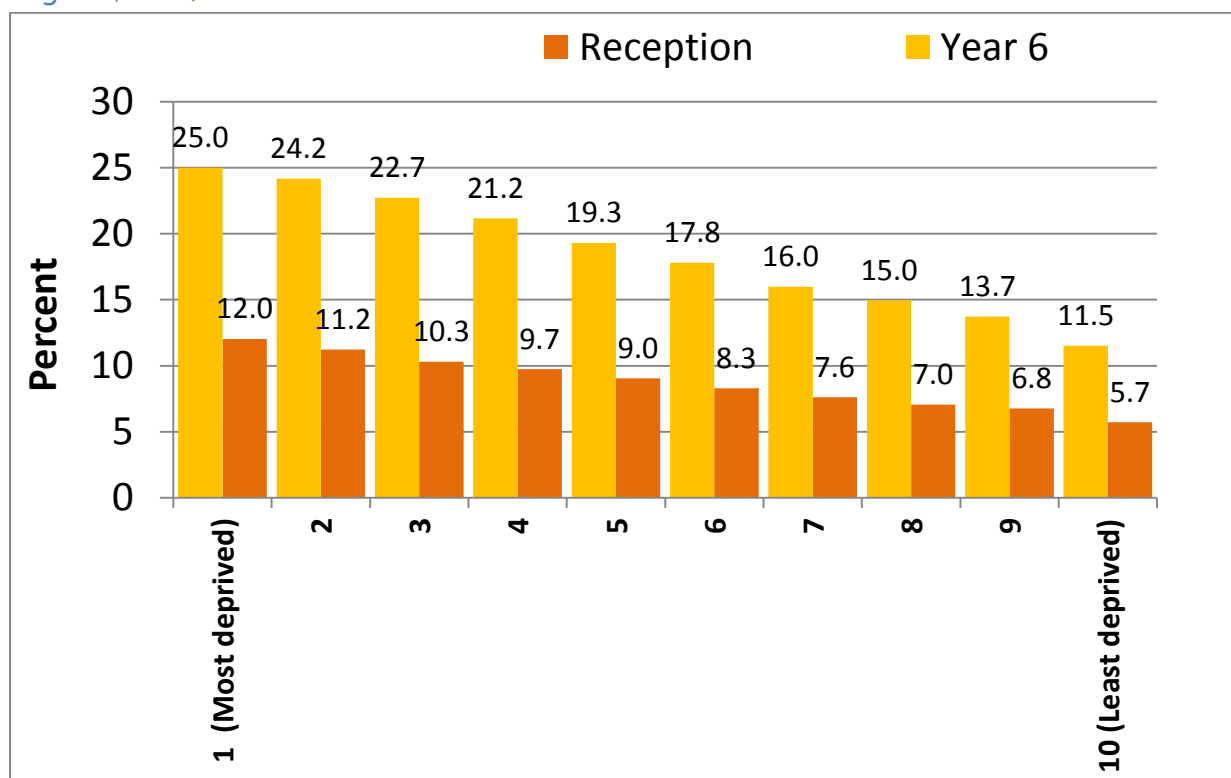
Data Source: Household Survey for England (HSE), 2014 and National Child and Maternal Intelligence Network (formerly CHIMAT)

Deprivation

Obesity prevalence in children is strongly correlated with disadvantage. Across England as a whole, obesity prevalence in the most deprived decile is approximately twice that in the least deprived for both reception and Year 6 children (Figure 10).

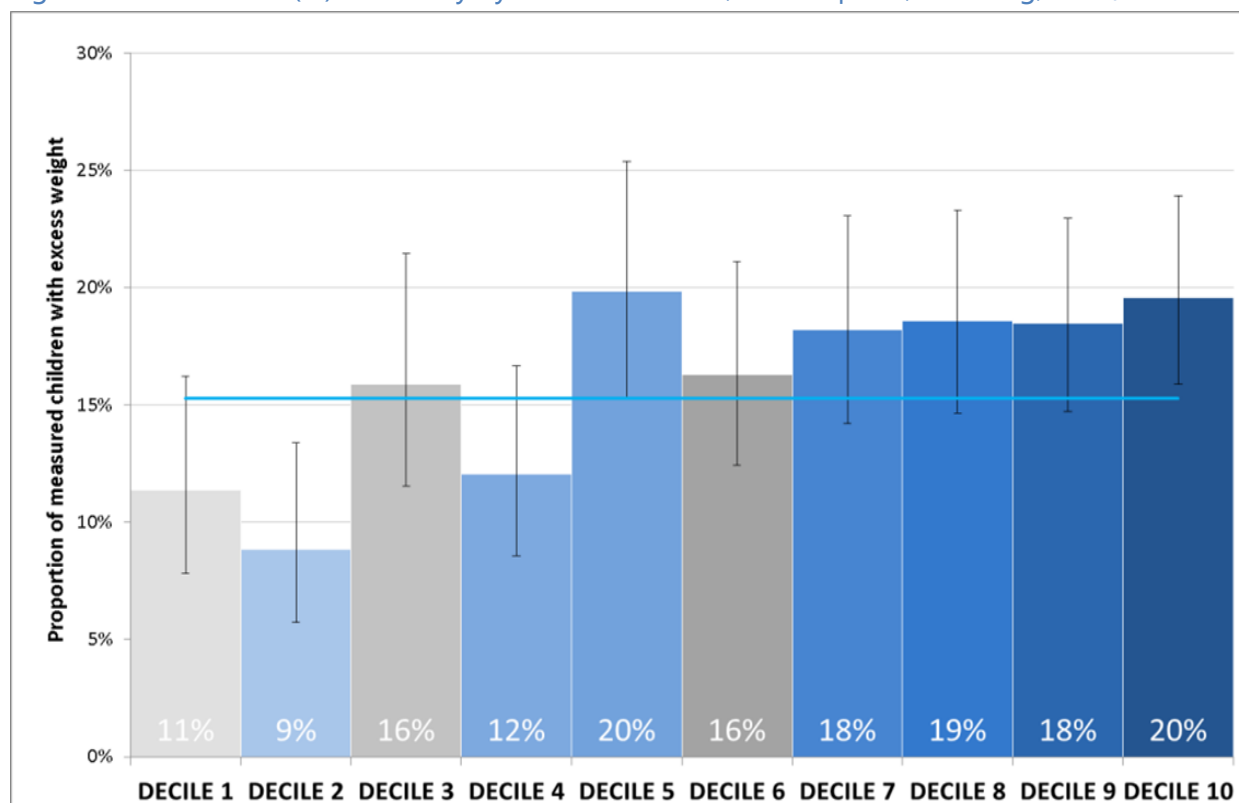
Small area data from the 2014/15 NCMP have still to be released at the time of writing. However, a similar trend was evident locally in 2013/14 with prevalence increasing from around 10% in the most affluent areas (decile 1) to around 20% in the most disadvantaged (decile 10) communities (Figure 11). As a result, the spatial distribution of childhood obesity across the borough mirrors the distribution of other forms of disadvantage with the greatest concentration in the north east, west and south of the borough (Figure 12).

Figure 10: Prevalence (%) of obesity by IMD 2010 decile, reception and Year 6 children, England, 2014/15



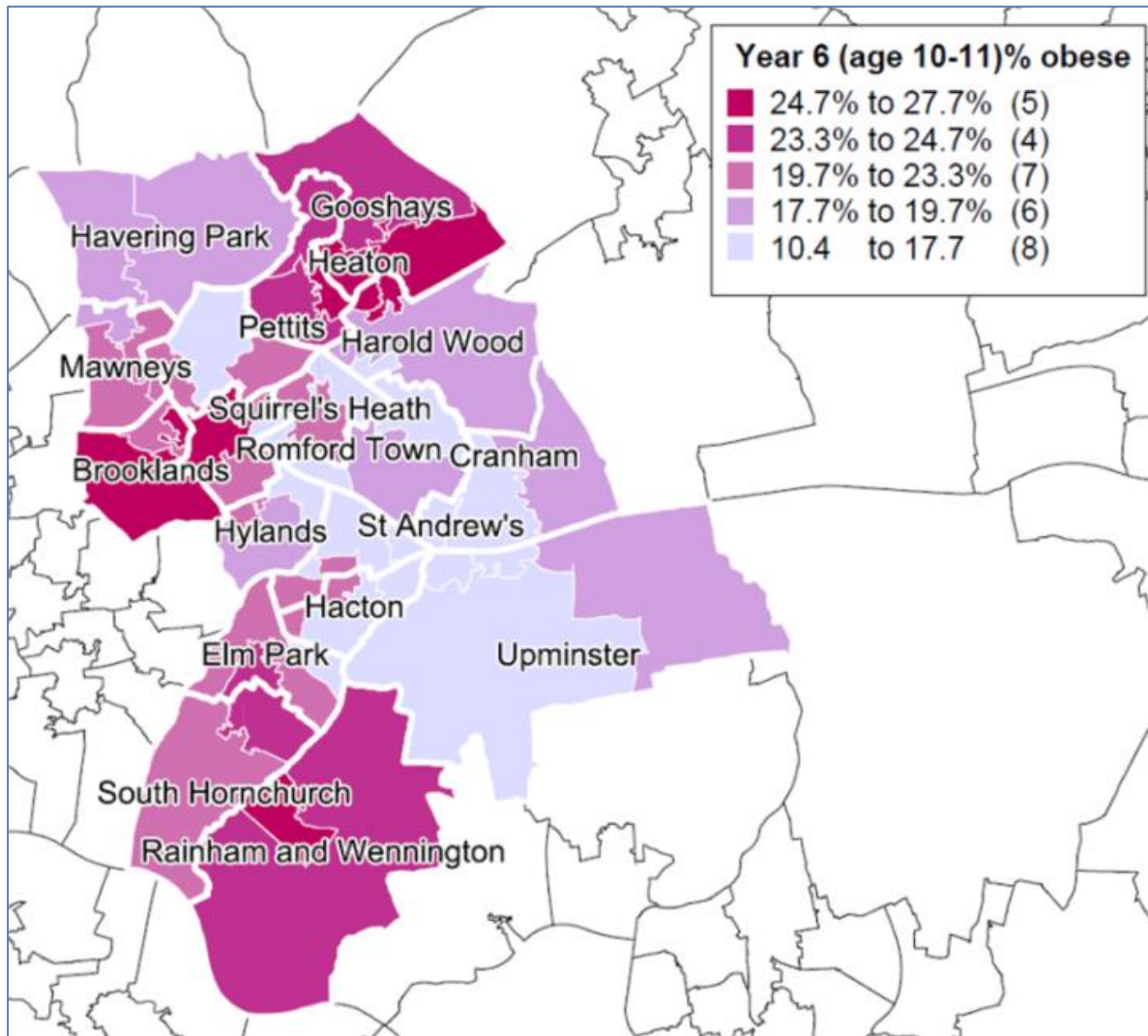
Data Source: National Child Measurement Programme (NCMP) 2014/15

Figure 11: Prevalence (%) of obesity by IMD 2010 decile; Yr Reception, Havering, 2013/14



Data Source: National Child Measurement Programme (NCMP) 2013/14

Figure 12: Map of inequalities in obesity prevalence; year 6 children; MSOAs in Havering, 2013/14



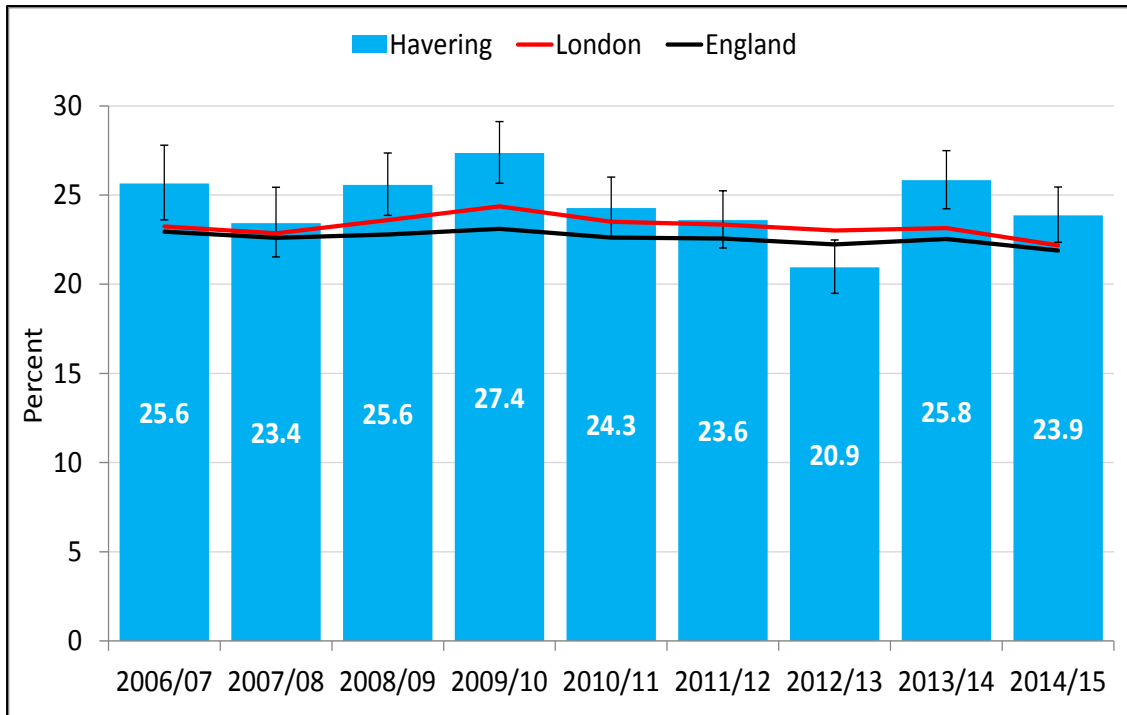
Data Source: NCMP; Analysis by LBH PHS

1.2.3 Trend

Data from the NCMP, suggest that childhood obesity levels in Havering have been more or less stable since its inception in 2006/7 (see Figure 13 and Figure 14).

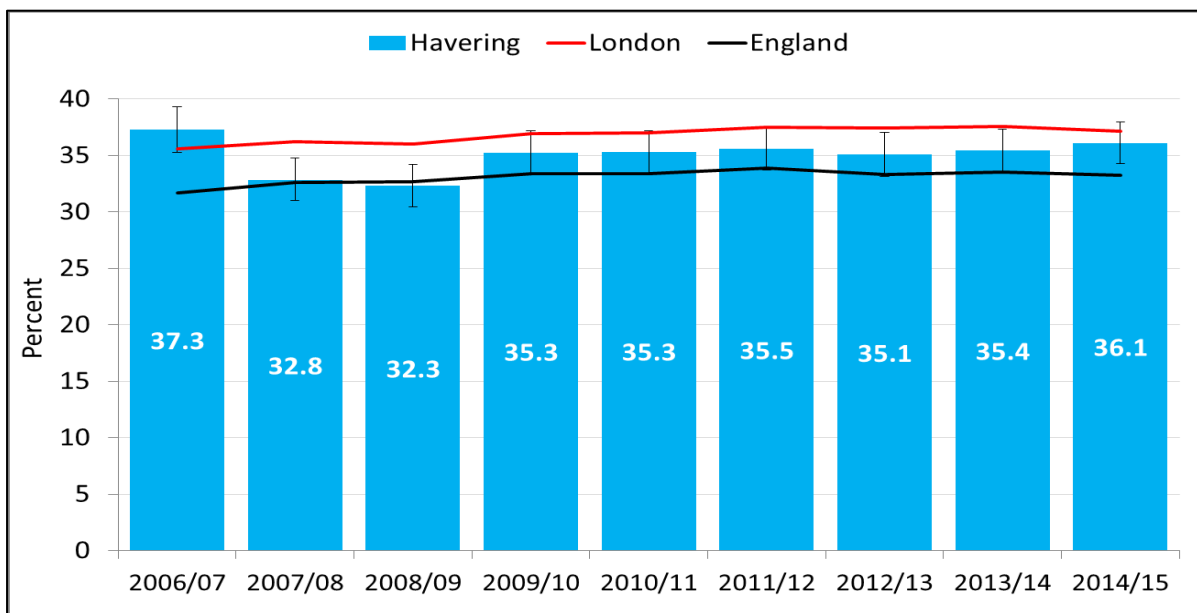
Childhood obesity levels are stable but unacceptably high

Figure 13: Prevalence (%) of childhood obesity in Reception year, Havering, London and England, 2006/7 - 2014/15



Data Source: National Child Measurement Programme (NCMP), 2006/07 to 2014/15

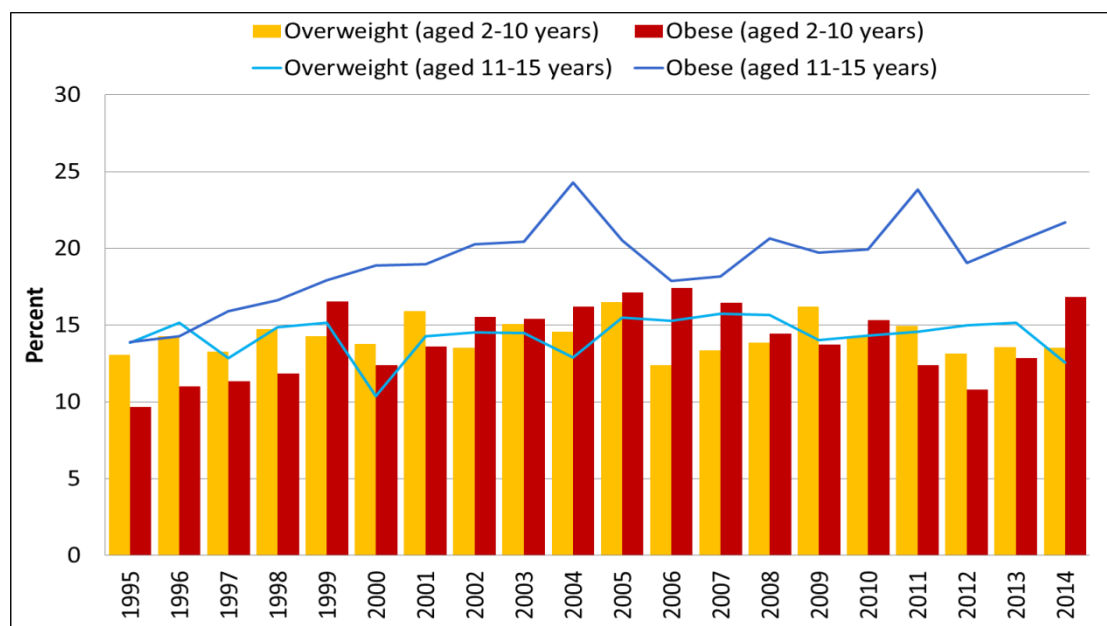
Figure 14: Prevalence (%) of childhood obesity in Year 6, Havering, London and England, 2006/7 – 2014/15



Data Source: National Child Measurement Programme (NCMP), 2006/7 to 2014/15

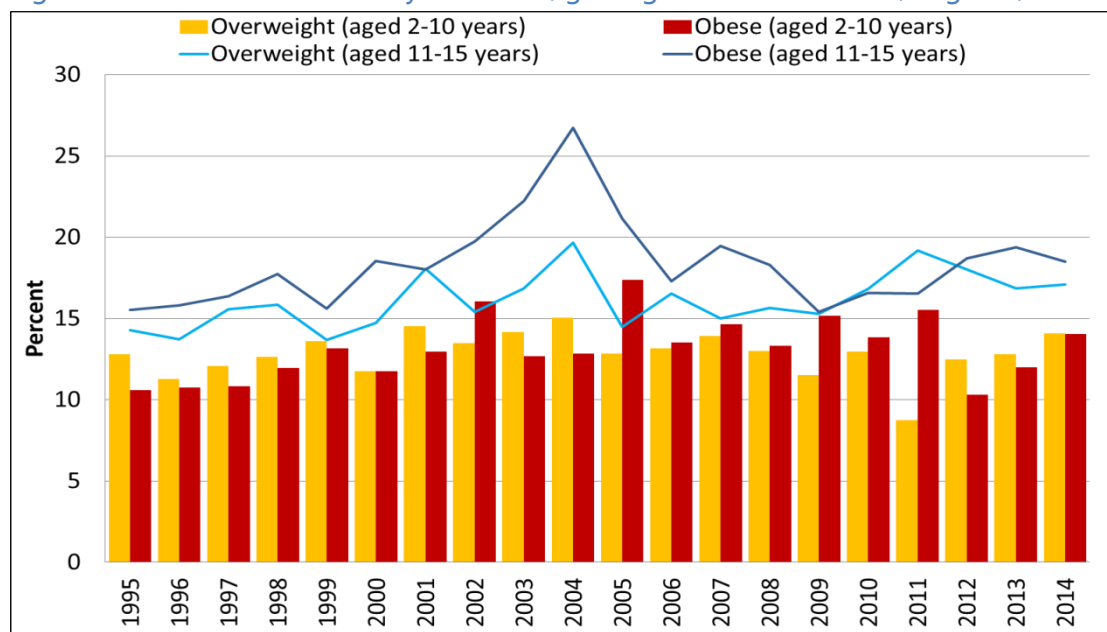
The Health Survey for England (HSE) provides data regarding national trends in childhood obesity over a longer time period and for a wider age range of children. Unsurprisingly a more complex picture emerges. From 1995 to 2004, the prevalence of obesity increased for both girls and boys and for both children (aged 2-10 years and 11-15 years) – see Figure 15 and Figure 16. Subsequently, obesity levels for boys have fluctuated but generally remained at or around similarly high levels whereas obesity levels for girls, particularly older girls, have fallen and stayed at slightly lower levels than at their 2004-5 peak.

Figure 15: Prevalence (%) of obesity over time; boys aged 2-10 and 11 - 15, England; 1995 - 2014



Data Source: Household Survey for England (HSE), 2014

Figure 16: Prevalence of obesity over time; girls aged 2-10 and 11-15, England; 1995-2014



Source: Household Survey for England (HSE), 2014

1.3 Maternal Obesity

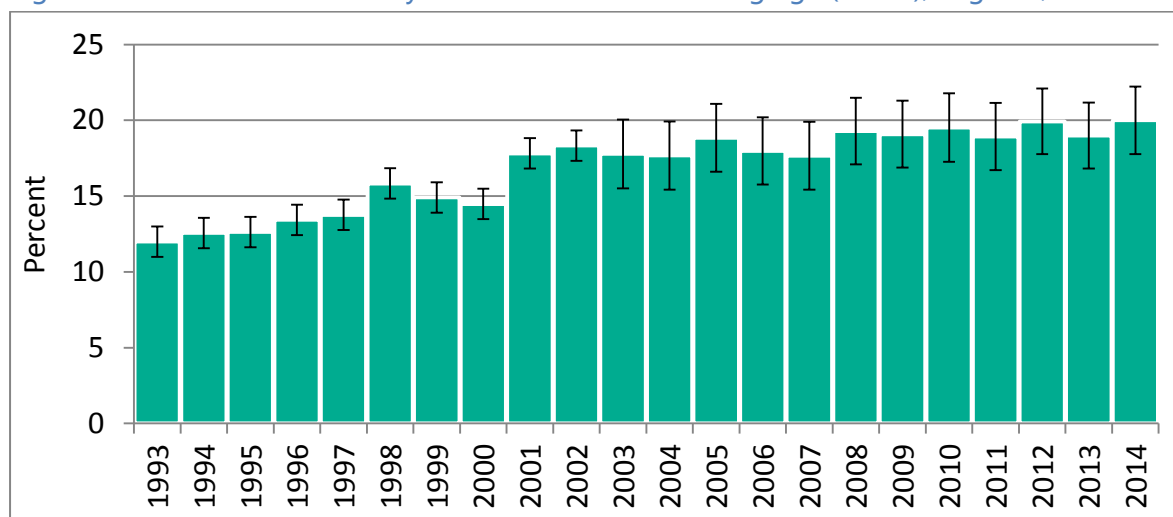
1.3.1 Definition

Maternal obesity is defined as a Body Mass Index (BMI) of 30 kg/m² or more at the first antenatal consultation. Concern about maternal obesity has increased with the growing evidence that it not only represents a risk in the short term to the health of mother and baby but also a means by which a heightened risk of obesity is transmitted to subsequent generations (see D. Subsequent generations).

1.3.2 Prevalence

Data on the prevalence of maternal obesity are not collected routinely in the UK⁸ but the Health Survey for England demonstrates that about 1 in 5 women of child bearing age are obese (Figure 17).

Figure 17: Prevalence of obesity in women of child bearing age (15-44), England, 1993-2013



Source: Household Survey for England (HSE) – Analysis by NOO⁹

A large retrospective study among maternity services in England found that in 2007, incidence of first trimester obesity (>30kg/m²) was 15.6%; 10% of the women had a BMI of 30.0-34.9kg/ m², 3.8% had a BMI of 35.0-39.9kg/m², 1.6% had a BMI of 40.0-49.9kg/ m² and 0.2% had a BMI of ≥50kg/ m².⁹ Secondary analysis of this dataset showed that Black and South Asian women had a higher incidence of first trimester obesity compared with White women.¹⁰

⁸ From November 2014, NHS-funded maternity service providers in England were mandated to collect data locally for inclusion in the Maternity Services Data Set (MSDS). Central submissions commenced in June 2015 and data will be available once the quality and coverage is at a sufficient level.

⁹ http://www.noo.org.uk/NOO_about_obesity/maternal_obesity_2015/prevalence

1.4 Inequalities in obesity

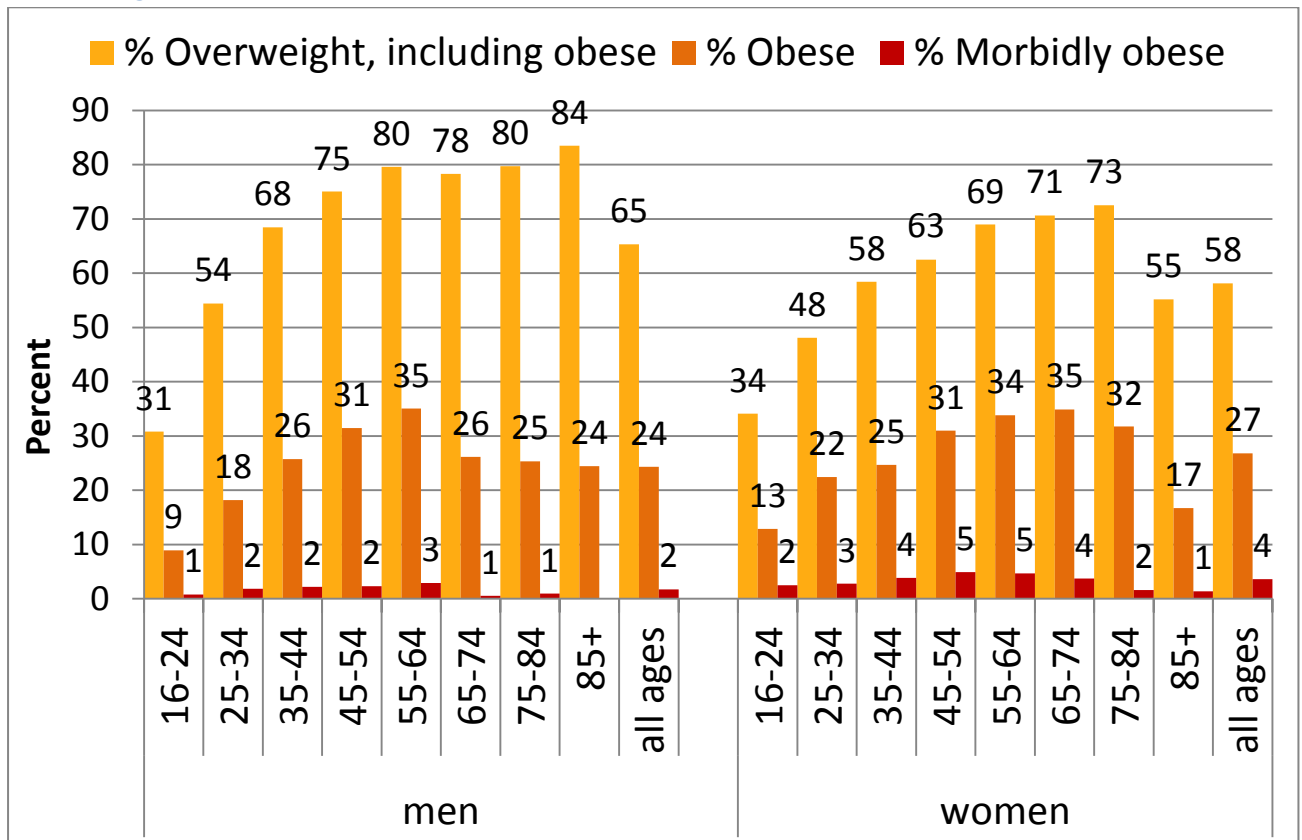
1.4.1 Age and gender

Nationally, the prevalence of overweight and obesity is lowest in the 16–24 years age group thereafter increasing with age before falling again amongst the very old.¹⁰

More men than women are overweight. But levels of obesity tend to be higher for women than men particularly among younger adults. The relatively high proportion of obese women of child bearing age is a particular concern given the growing evidence that maternal obesity is a threat to the health of both mother and child (see 1.3 Maternal Obesity). Morbid obesity is twice as common in women (3.6%) as it is in men (1.8%) – see Figure 18.

Obesity levels vary significantly between population groups and communities - contributing to inequalities in health

Figure 18: Prevalence (%) of overweight, obesity and morbid obesity, by age and gender, adults, England, 2014



Source: Household Survey for England (HSE), 2014

More women (45%) than men (32%) have a 'very high' waist circumference. More women (43%) than men (34%) are categorised as being in the high or very high risk of ill health

¹⁰ [Health Survey for England, 2014.](#)

based on a combined assessment of BMI and waist circumference as recommended by NICE (see Figure 3).

1.4.2 Ethnic group

HSE 2014 demonstrates significant differences in the prevalence of obesity between ethnic groups. For example, 4 in 10 Black women have a BMI of 30 or greater falling to 2 in 10 Asian women whereas about 1 in 4 of both White and Black men have a BMI of 30 or more; falling to 1 in 7 Asian men. However, this analysis overlooks the differing risk to health posed by a given BMI to different ethnic groups.

A WHO review found that for Asian adults (including South Asian and Chinese) diabetes risk is increased at a lower threshold than for White adults¹¹. Subsequently, NICE recommended use of variable thresholds in Table 5 to guide lifestyle interventions to prevent conditions such as diabetes, myocardial infarction or stroke¹².

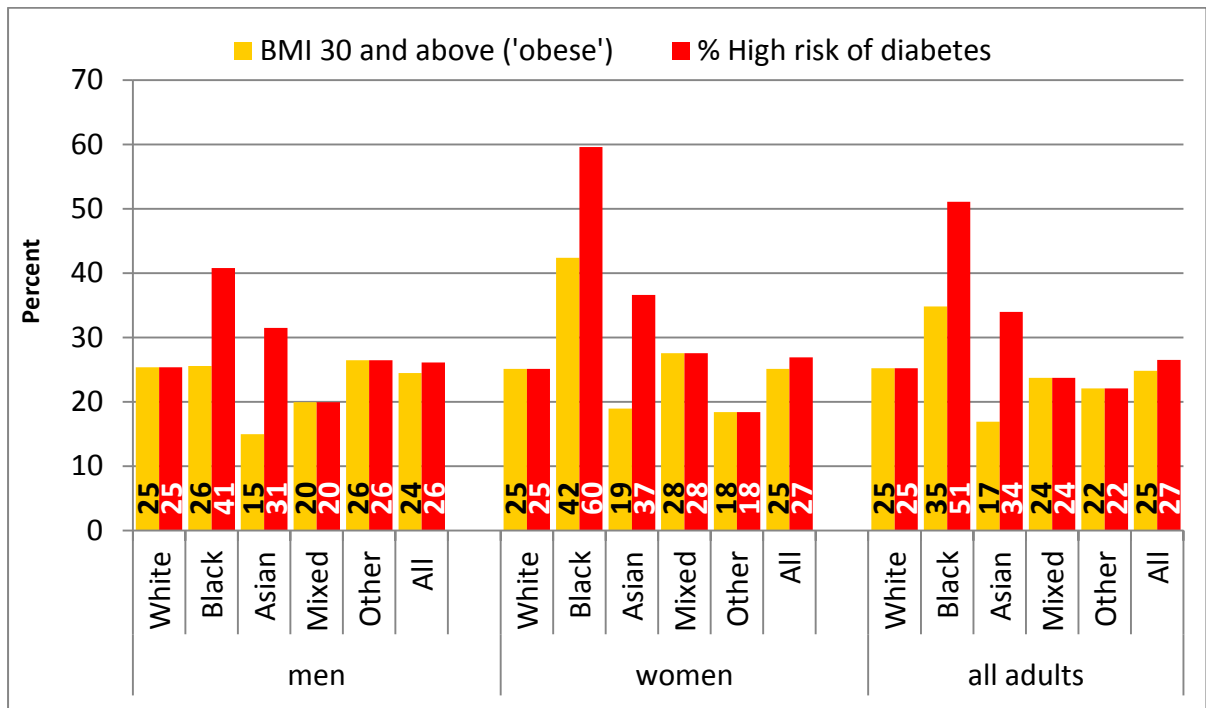
Table 5: NICE recommended adult BMI thresholds for stated ethnic groups

	Asian and Black populations	other populations
Underweight	BMI less than 18.5kg/m ²	BMI less than 18.5kg/m ²
Increasing but acceptable risk	BMI 18.5kg/m ² – 23kg/m ²	BMI 18.5kg/m ² -24.9kg/m ²
Increased risk	BMI 23kg/m ² - 27.5kg/m ²	BMI 25kg/m ² – 30kg/m ²
High risk	BMI 27.5kg/m ² or higher	BMI 30kg/m ² or higher

Data Source: Health Survey for England (HSE), 2014

Applying these revised thresholds to HSE 2014 data it's evident that nearly 6 in 10 Black women and a 1/3rd of Asian women are at high risk of disease due to their BMI compared with a 1/4 of all women; and 4 in 10 Black men and 3 in 10 Asian men are at high risk versus 1/4 of all men (Figure 19).

Figure 19: BMI category and diabetes risk, adults by gender and ethnicity in England, 2012-14

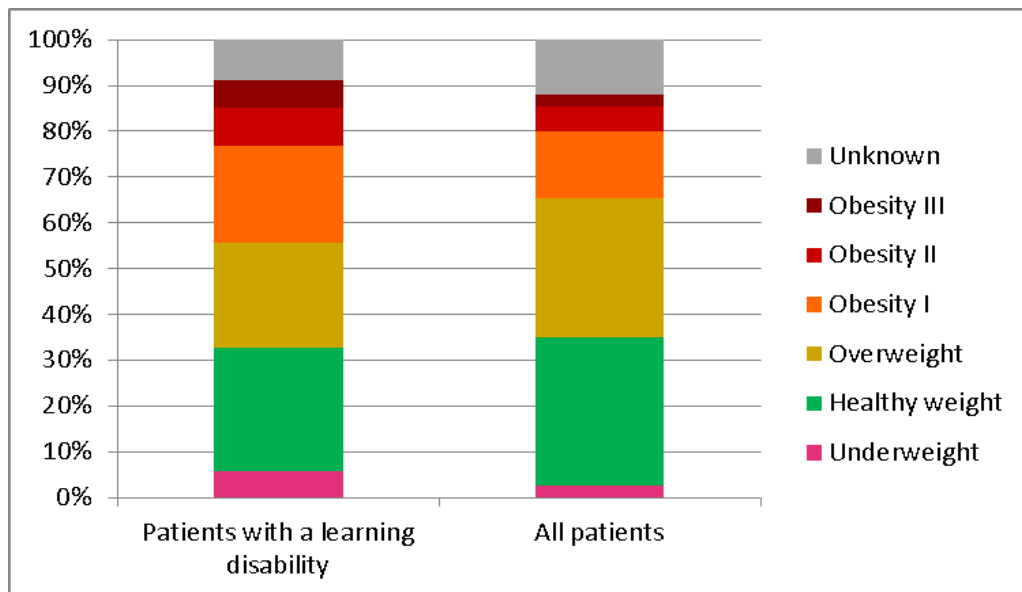


Data Source: Household Survey for England (HSE), 2014

1.4.3 Long term illness and or disabilities

Local GP data demonstrate that patients recorded as having a learning disability are more likely to be obese and more likely to be severely obese than the population as a whole (Figure 20).

Figure 20: Prevalence of obesity; patients with a learning disability and all patients; Havering 2015

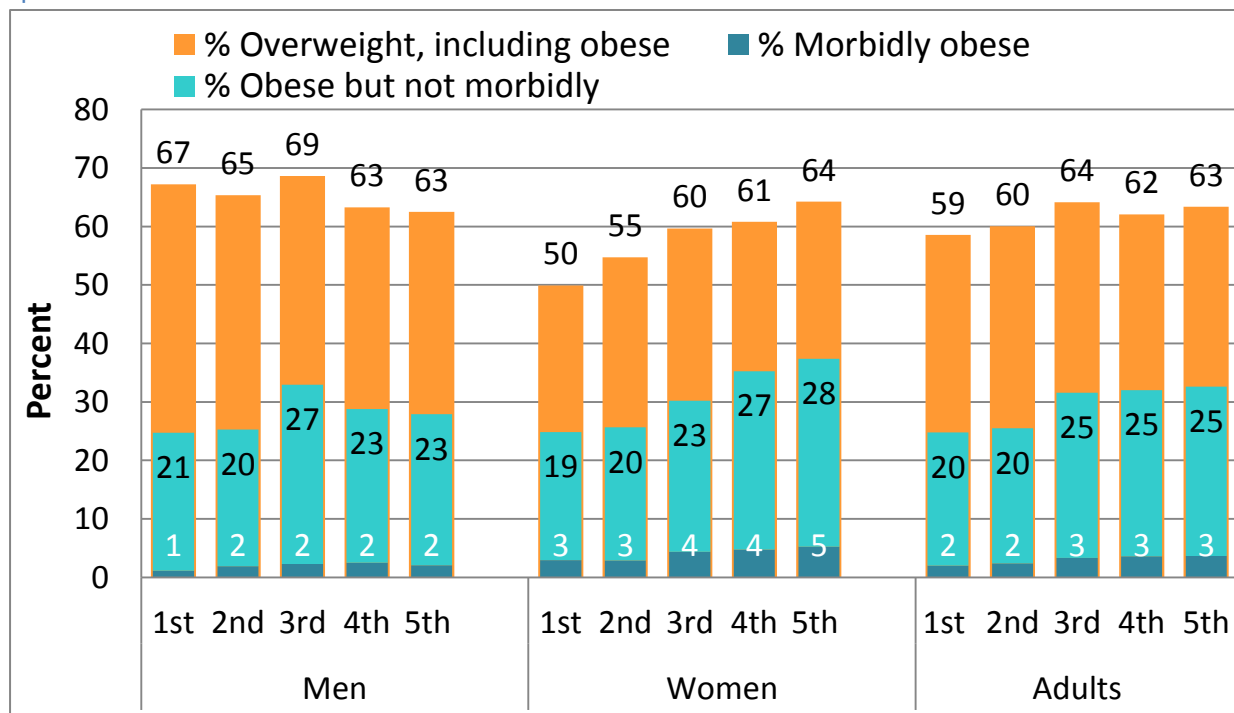


Source: Health Analytics, 2015

1.4.4 Deprivation

Data from the HSE 2014 demonstrate an association between obesity and area deprivation (IMD 2010) with 22% of adults in quintile 1 (least disadvantaged) recorded as obese rising to 29% in quintile 5 (most disadvantaged). The association is stronger for women than men.

Figure 21: Prevalence of obesity (%), adults, England, 2014, by disadvantage (IMD2010) quintile



Data Source: Household Survey for England (HSE), 2014

Morbid obesity reduces life expectancy by 8-10 years - equivalent to the effects of lifelong smoking

1.5 Harmful Effects

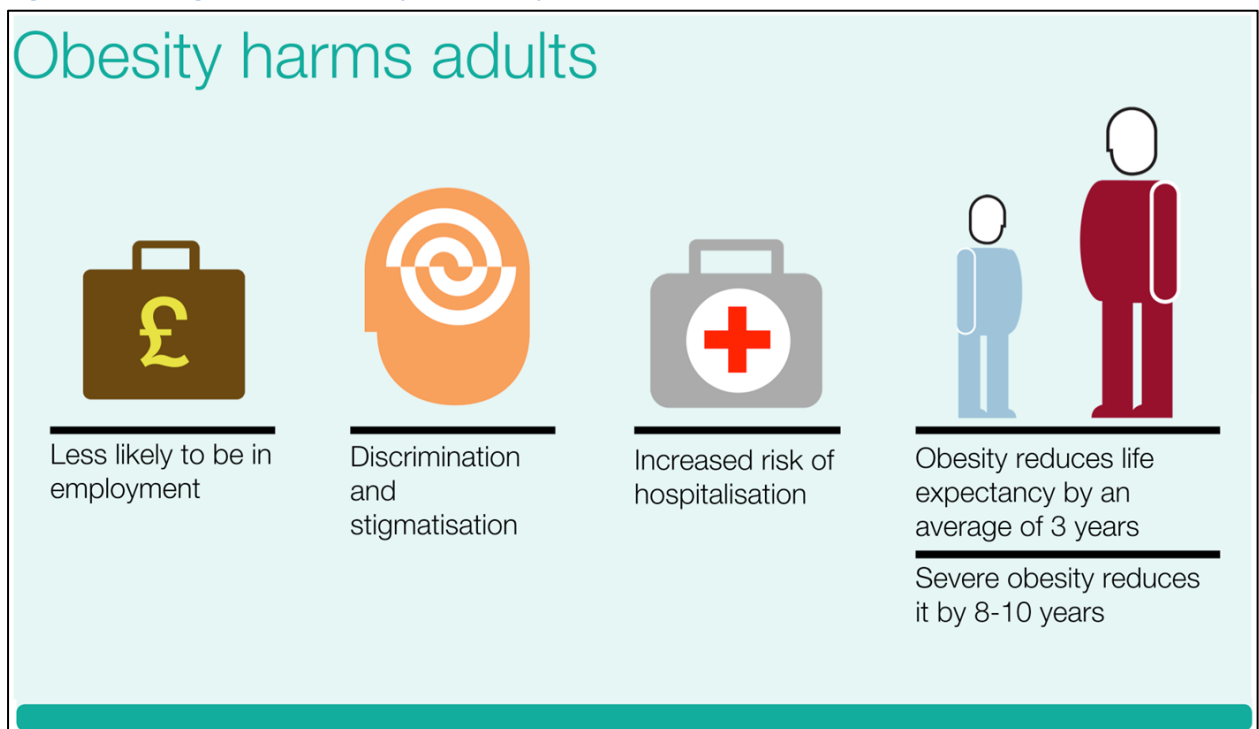
Overweight and obesity was earlier described as excessive fat accumulation that may impair health. Hence the following discussion focuses on the impact of obesity on health outcomes including life expectancy, mortality rates and the likelihood of developing significant limiting diseases.

However, this is only a partial picture of the harms caused by obesity and an attempt is made to outline the wider societal costs.

1.5.1 Health Impact

A. Adults

Figure 22: Infographic summary of obesity harms to adults



Source: National Obesity Observatory, Making the case for tackling obesity slideset (Feb. 2015)

The effects of obesity on the body can be attributed to the simple physical changes associated with the increased mass of fatty tissue, and changes at the metabolic level. The physical changes add to 'wear and tear' on joints and contribute to the psychological and social difficulties associated with obesity. Most other effects are due to 'invisible' changes at the cellular level such as an altered response to insulin. Taken together, the physical and metabolic effects of obesity increase the risk of developing a wide range of potentially serious diseases affecting all aspects of physical and mental health including:

- Musculoskeletal problems

- Raised body weight puts strain on the body's joints, especially the knees, increasing the risk of osteoarthritis.
- There is also an increased risk of low back pain.
- Diseases of the circulatory system
- The risk of coronary heart disease (including heart attacks and heart failure) and stroke are both substantially increased.
- Raised BMI increases the risk of hypertension (high blood pressure), which is itself a risk factor for coronary heart disease and stroke and can contribute to other conditions such as renal failure¹³.
- Metabolic and endocrine system problems
- The risk of Type 2 diabetes is substantially raised: it has been estimated that excess body fat underlies almost two-thirds of cases of diabetes in men and three quarters of cases in women.
- There is a greater risk of dyslipidaemia (for example, high total cholesterol or high levels of triglycerides), which also contributes to the risk of circulatory disease by speeding up atherosclerosis (fatty changes to the linings of the arteries).
- Metabolic syndrome is a combination of disorders including high blood glucose, high blood pressure and high cholesterol and triglyceride levels. It is more common in obese individuals and is associated with significant risks of coronary heart disease and Type 2 diabetes.
- Cancers
- The risk of several cancers is higher in obese people, including endometrial, breast and colon cancers¹⁴.
- Reproductive and urological problems
- Obesity is associated with greater risk of stress incontinence in women.
- Obese women are at greater risk of menstrual abnormalities, polycystic ovarian syndrome and infertility.
- Obese men are at higher risk of erectile dysfunction.
- Respiratory problems
- Overweight and obese people are at increased risk of sleep apnoea (interruptions to breathing while asleep) and other respiratory problems such as asthma.
- Non-alcoholic fatty liver disease (NAFLD)
- NAFLD describes a range of conditions resulting from the accumulation of fat in cells inside the liver. It is one of the commonest forms of liver disease in the UK. If left untreated, it may progress to severe forms and has also been linked to liver cancer¹⁵.
- Gastrointestinal disease
- Increased risk of gastro-oesophageal reflux and gall stones
- Psychological and social problems
- Overweight and obese people may suffer from stress, low self-esteem, social disadvantage, depression and reduced libido.
- Obese individuals are more likely to have common mental health problems and people with mental health problems are more likely to be obese.¹⁶

The National Audit Office summarised the additional risk posed by obesity of developing a variety of associated diseases in Table 6.

Table 6: Estimated increased risk for the obese of developing associated diseases, taken from international studies

Disease	Relative risk – women	Relative risk - men
Type 2 Diabetes	12.7	5.2
Hypertension	4.2	2.6
Myocardial Infarction	3.2	1.5
Cancer of the Colon	2.7	3.0
Angina	1.8	1.8
Gall Bladder Diseases	1.8	1.8
Ovarian Cancer	1.7	-
Osteoarthritis	1.4	1.9
Stroke	1.3	1.3

Source: National Audit Office (NAO) 2001

Maternal obesity is associated with health risks for both the mother and the child during and after pregnancy. Further information about maternal obesity is provided in 1.3 Maternal Obesity.

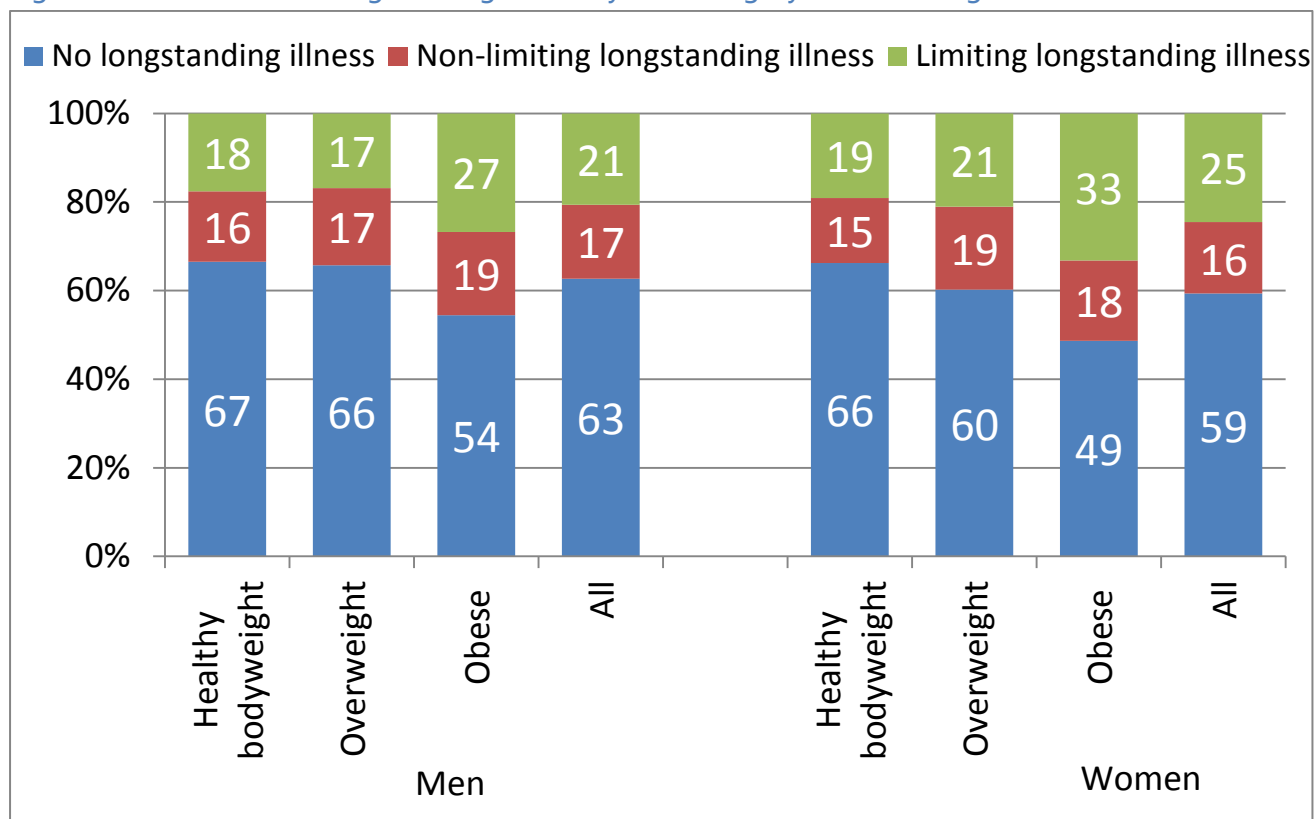
The risk of ill-health increases with increasing BMI but many of the complications of obesity can be reduced by weight loss.¹⁷ See 4.4.3 Weight management services and clinical treatment for more information about the benefits of weight loss.

The harm to health caused by obesity can be quantified in various ways. Moderate obesity (BMI 30-35 kg/m²) reduces life expectancy by an average of three years, while very severe obesity (BMI 40-50kg/m²) reduces life expectancy by 8-10 years – equivalent to the effects of lifelong smoking.¹⁸

In 2001, the National Audit Office estimated that approximately 6% of all deaths in England in 1998 were caused by obesity – a total of 30,000 excess deaths in that year. This compared to approximately 10% of deaths that were attributable to smoking, and 1% caused by road traffic incidents at that time.¹⁹ HSE 2014 demonstrated that a higher proportion of obese adults (30%) have a limiting longstanding illness¹¹ than peers with a healthy bodyweight (19%) – see Figure 23.

¹¹ Longstanding illness is any physical or mental health condition or illness lasting or expected to last 12 months or more. A limiting longstanding illness is one that reduces a person's ability to carry out day-to-day activities.

Figure 23: Prevalence of longstanding illness by BMI category; adults in England, 2014

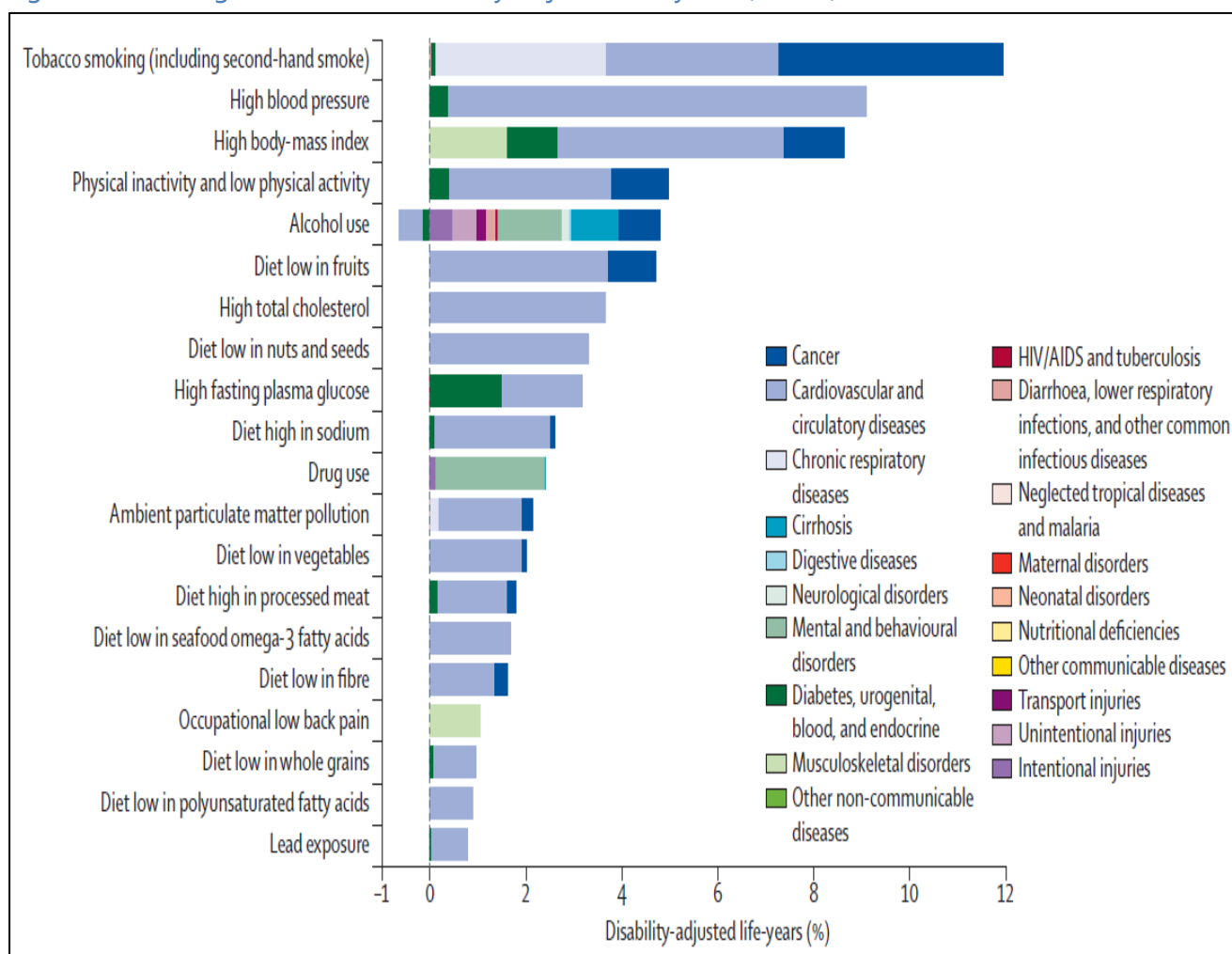


Source: Household Survey for England (HSE), 2014

Disability- Adjusted Life Years (DALYS) are a measure of the overall harm to health due to both premature death and illness¹². In 2010, high body-mass index accounted for 8.6% [7.4–9.8] of DALYS in the UK. The leading risk factor in the UK was still tobacco accounting for 11.8% of DALYS [10.5–13.3]. To some extent this represents the legacy of high smoking prevalence in the past whereas the burden of disease due to obesity is likely to grow further as the consequences of increased levels of obesity on mortality and ill-health have still to be fully realised.²⁰

¹² One DALY can be thought of as one lost year of "healthy" life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability. See WHO [website](#) for more information.

Figure 24: Leading causes of UK disability-adjusted life years (DALYs), 2010



Source: <http://www.sciencedirect.com/science/article/pii/S0140673613603554>

B. Mothers

Obese women are at increased risk of poor health outcomes during pregnancy. For example:

- A recent UK study found that increasing levels of overweight and obesity leads to greater risks of gestational diabetes, hypertensive disorders of pregnancy, caesarean section, macrosomia (baby weighing more than 4kg at birth) and neonatal unit admission. Women with severe obesity were at risk of additional adverse outcomes, including stillbirth, a longer postnatal stay, and wound problems following caesarean section.²¹
- A large systematic review and meta-analyses concluded that overweight and obese women have increased risk of both induced preterm birth before 37 weeks and overall preterm birth before 32 weeks.²²
- A recent systematic review of reviews found that gestational diabetes, pre-eclampsia, gestational hypertension, depression, instrumental and caesarean birth, and surgical site infection to be more likely to occur in pregnant women with obesity compared with women with a healthy weight.²³
- It is estimated that 29% of diabetes in pregnancy, 12% of caesarean section, 5% of post-partum haemorrhage, 4% of preterm delivery, 7% of macrosomia, and 5% of

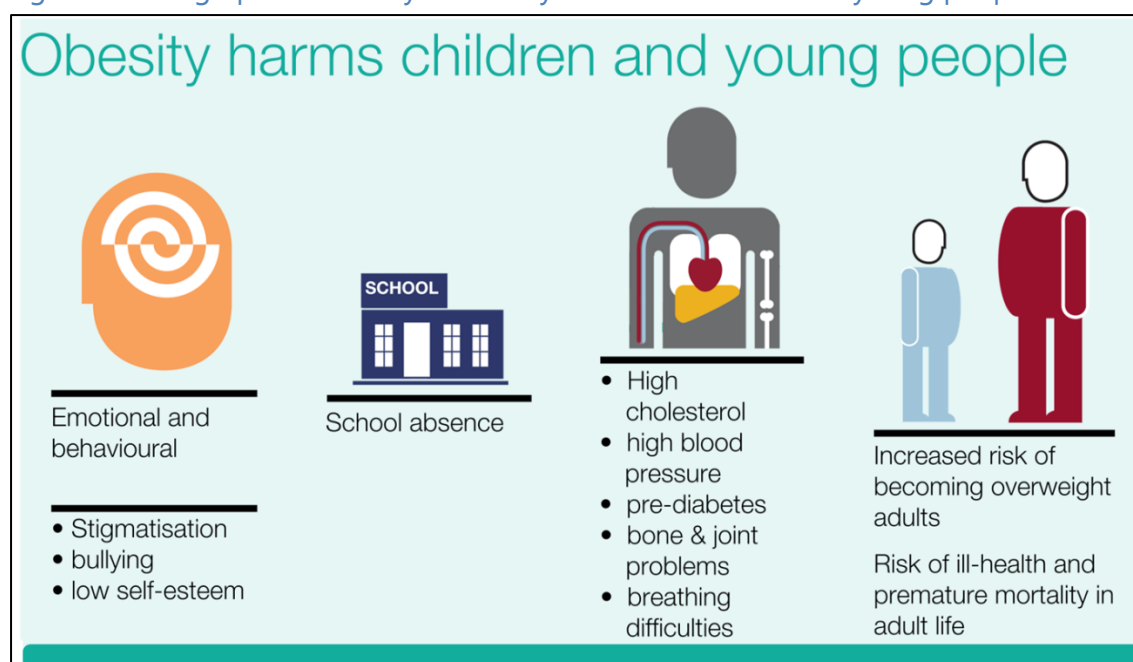
admissions to a neonatal intensive care unit or special care baby unit could potentially be avoided if all pregnant women were of normal BMI at the start of pregnancy.²⁴

- Maternity costs are significantly higher for overweight or obese women compared to women of a healthy BMI. For example, a recent Welsh study found that there was an increase in total health service costs during pregnancy for overweight women of 23% and for obese women of 39% compared with women of a healthy weight.²⁵
- Maternal mortality is relatively rare in the UK with an incidence rate of 10.1 per 100,000 maternities. The UK Confidential Enquiries into Maternal Deaths and Morbidity 2009-2012 found that out of all the women who died during, or within six weeks of the end of their pregnancy, 27% obese.²⁶

The risk to the health of both mother and baby increases with increasing BMI²⁷.

C. Children

Figure 25: Infographic summary of obesity harms to children and young people



Source: National Obesity Observatory, Making the case for tackling obesity slideset (Feb. 2015)

Childhood obesity may be associated with emotional and behavioural problems from a very young age.²⁸ Not least because obese children are likely to be the subject of fat-related teasing and bullying.²⁹

In addition, obese children are at greater risk of breathing difficulties, bone fractures, hypertension, early markers of cardiovascular disease and insulin resistance – a precursor of diabetes.³⁰ The combination of physical and mental health problems associated with childhood obesity is such that obese and overweight adolescents may have a third more sick days than peers with a healthy bodyweight.³¹

Not all overweight children become overweight adults but overweight at any age in childhood increases the risk for overweight in adulthood. Obese children are between 2 and 10 x more likely to be obese in adulthood than non-obese children. The risk is higher as children age and for boys in comparison with girls.³²

Overweight and obese children are at increased risk of ill-health and early death in adulthood.³³

There is strong evidence that maternal obesity is associated with increased risk of stillbirth, foetal, neonatal and infant death; with risk increasing with greater BMI. For example:

- a study has estimated that every 5 unit rise in maternal BMI amongst overweight and obese women increased the risk of foetal death by 21%, miscarriage by 16%, stillbirth by 24%, neonatal death by 15%, post neonatal death by 14% and infant death by 18%.³⁴
- maternal obesity is associated with an increased risk of a range of congenital anomalies including neural tube defects, cardiovascular anomalies, cleft lip and palate.³⁵ But the detection of congenital anomalies by antenatal ultrasound is more difficult in obese pregnant women.³⁶

D. Subsequent generations

There is good evidence that the children of obese mothers are at an increased risk of later obesity themselves.^{37 38} The relative contributions of genetic factors, the effect of the obesity on the foetal environment (foetal programming) and of poor eating habits/ nutrition in childhood remain unclear but all are likely to be important.

However, through two recent annual reports, the Chief Medical Officer has sought to highlight the Developmental Origins of Health and Disease (DOHaD) concept, and the opportunities that this brings to implement novel interventions to halt or reverse upward trends in Non-Communicable Diseases.³⁹ Foetal programming, a key element of the DOHaD concept, is proposed as the mechanism whereby the effects of some risk factors experienced during pregnancy can be transmitted to the following generation by changing the expression of certain genes during development.

The possibility of changes in the germline cells in the foetus raises the possibility that *'... a woman's health whilst she is pregnant also impacts on the health of her children and grandchildren.'*⁴³

1.5.2 Financial Burden

The harm caused by obesity can also be expressed in financial terms. The total cost of obesity to the UK economy as a whole 2015 has been estimated as being £27bn.⁴⁰

A significant proportion of this relates to health care costs. In 2006/07, the direct cost to the NHS of people being overweight and obese was estimated as £5.1bn or 6.3% of the total

¹³ Prof Dame Sally C Davies, Page 10 Annual Report of the CMO, 2014.

NHS budget⁴¹. Health care costs are likely to increase by a further £2bn a year by 2030 as the prevalence of obesity increases and improved but more expensive treatments for related conditions become available⁴².

Social care costs are also significant. Severely obese people are over 3 times more likely to need social care than those who are a healthy weight.⁴³ The estimated annual social care cost of obesity¹⁴ to Local Authorities in 2011-12 was estimated as £352m.

The wider societal costs are many and varied. The welfare costs alone are estimated to be between £1 billion and £6 billion⁴⁴ partly because obese people are less likely to be in employment⁴⁵. In addition, obese people on average take four more sick days per year than colleagues with a healthy bodyweight.⁴⁶ Hence employers lose out through lost productivity and increased sickness costs⁴⁷. An organisation employing 1000 people is likely to lose more than £126,000 a year in lost productivity due to a range of obesity related issues including back problems and sleep apnoea⁴⁸.

¹⁴ Cost of extra formal hours of help for severely obese compared to healthy weight people.

2. Maintaining a healthy body: Eating well and being active

This section contains information about levels of healthy eating and physical activity and the benefits of doing so. Obesity occurs when energy intake from food and drink consumption is greater than energy expenditure through the body's metabolism and physical activity over a prolonged period, resulting in the accumulation of excess body fat. Individuals and whole communities that eat well and are physically active are more likely to maintain a healthy body weight and accrue many other benefits independent of the positive impact on obesity levels.

1. Physical Activity

Benefits

Levels of Physical Activity

2. Healthy Eating

Definition

Energy Intake

Sources of energy

2.1 Physical Activity

2.1.1 Benefits

"The potential benefits of physical activity to health are huge. If a medication existed which had a similar effect, it would be regarded as a 'wonder drug' or 'miracle cure'."

Sir Liam Donaldson, Chief Medical Officer, March 2010

A. Adults

There is a three-year difference in life expectancy between people who are inactive and people who are minimally active.⁴⁹

People who do regular physical activity have⁵⁰

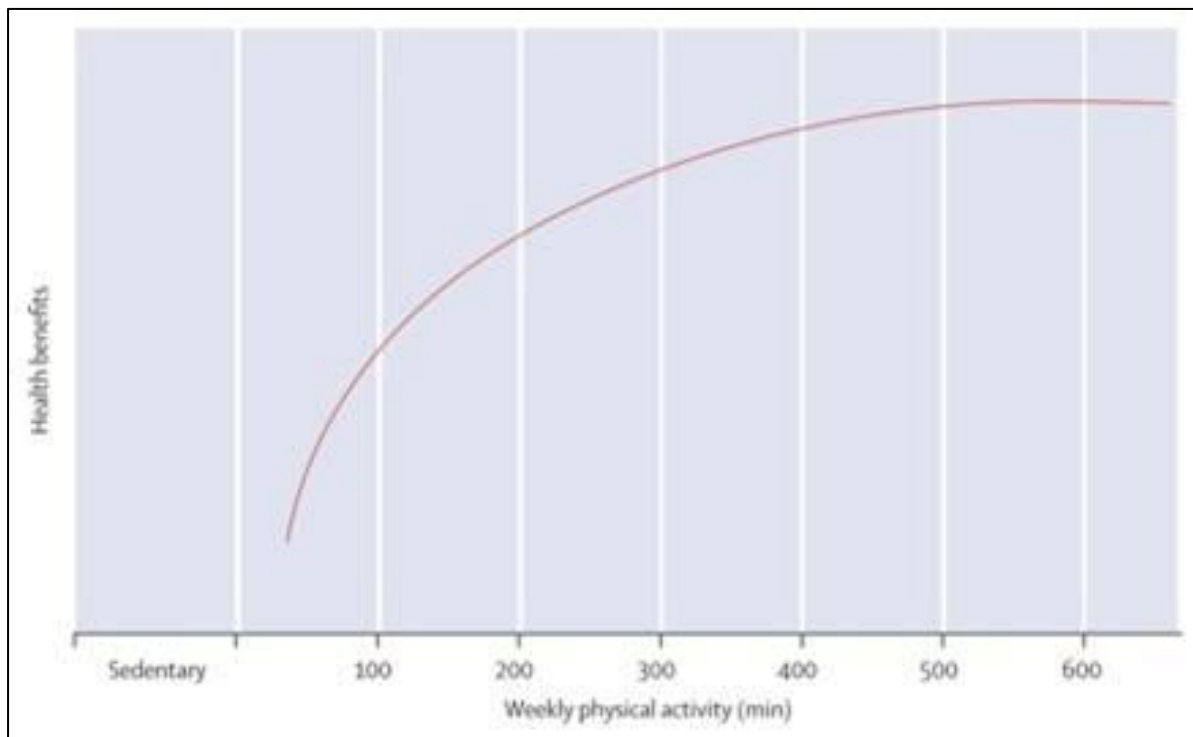
- up to a 35% lower risk of coronary heart disease and stroke
- up to a 50% lower risk of type 2 diabetes
- up to a 50% lower risk of colon cancer
- up to a 20% lower risk of breast cancer
- a 30% lower risk of early death
- up to an 83% lower risk of osteoarthritis
- up to a 68% lower risk of hip fracture
- a 30% lower risk of falls (among older adults)
- up to a 30% lower risk of depression
- up to a 30% lower risk of dementia

Physical activity is also an effective 'treatment' with the potential to improve outcomes and functioning for patients with established disease including respiratory disease, heart disease, hypertension, diabetes, osteoarthritis, chronic pain, cancer, depression and dementia⁵¹.

Generally speaking, the more active we are the greater the health benefit. The most inactive have the most to gain and very modest and achievable changes e.g. moving from inactive to minimally active - can result in significant health benefits although not as great as accrue if physical activity reach recommended levels.

Being physically active adds years to life and life to years – extending longevity, preventing physical illness and boosting mental wellbeing.

Figure 26: Relationship between health benefits and duration of physical activity⁵².



Source: NOO

The benefits of physical activity are not limited solely to health. Most obviously, increases in physical activity would result in massive savings to the public purse. Savings of at least 15% of the NHS healthcare's £120 billion UK budget and a similar reduction of over 15% in the UK nations' social care budget would be forthcoming if the whole population reached recommended levels of physical activity.⁵³

In addition:

- Physical activity serves to get us out the door and connecting with others, avoiding social isolation, increasing social capital and community spirit. Pedestrians help keep local high streets alive.
- Sport offers many entry-level jobs and opportunities for volunteering that can lead to full-time careers.
- Businesses with active workforces are more productive, have lower sickness rates and lower staff turnover.⁵⁴
- Participation in sport can reduce levels of crime and antisocial behaviour.⁵⁵

B. Children and young people

Once learnt, a skill like swimming or riding a bike is there for life. Being active in childhood establishes habits and values that shape behaviours in adulthood.⁵⁶




Active play is a fundamental part of physical, social and emotional development from infancy. Physical activity has significant and immediate benefits during childhood in terms of:

- Physiological outcomes – on cardio-metabolic health, muscular strength, bone health and cardiorespiratory fitness.
- Psychological outcomes – self-esteem, anxiety/stress, academic achievement, cognitive functioning and attention/concentration.
- Social outcomes – higher levels of confidence and peer acceptance.

Figure 27: Summary of the strength of the association between physical activity and stated positive outcomes for children and young people

Physiological	Psychological	Social	Behavioural
Cardio-metabolic health	Self-esteem	Confidence	Physical activity in adolescence/adulthood
Muscular strength	Anxiety/stress	Peer acceptance	Sleep
Bone health	Academic achievement	Positive relationships	Risk taking behaviour
Cardiorespiratory fitness	Cognitive functioning	Social & communication skills	
Motor skills/development	Attention/concentration	Self-resilience	
Body composition	Self-efficacy	School engagement	
	Mood		
	Memory		
	Body image		

“Our review found good evidence to support the association between physical activity and psychological outcomes in children, with academic achievement, cognitive functioning and attention having a strong association. Anna Chalkley, co-author of [change4life evidence review](#).”

-  Green outcomes have consistent evidence
-  Amber outcomes have inconsistent evidence, or evidence from a small number of studies
-  Red outcomes have insufficient evidence

Reproduced from Chalkley A et al. 2015 Change4life evidence review.

2.1.2 Levels of physical activity

A. Adults

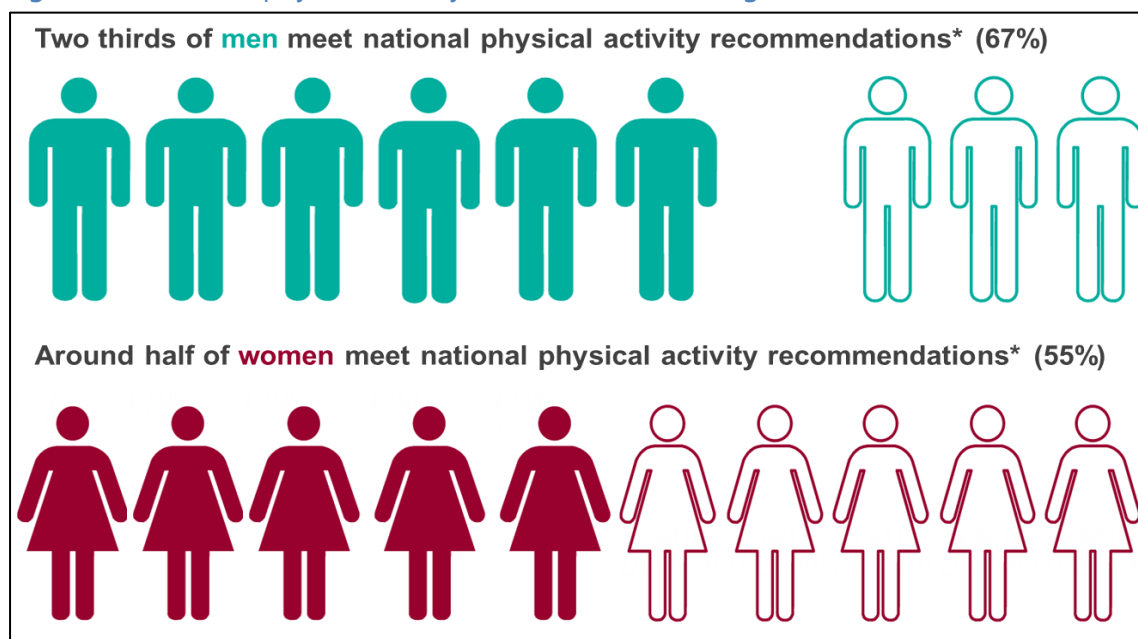
The [Chief Medical Officer](#) recommends⁵⁷ the following as minimum levels of physical activity for adults:

- 150 minutes (two and half hours) each week of moderate intensity physical activity, such as brisk walking or cycling, in bouts of ten minutes or more (for example 30 minutes moderate activity on at least five days a week).

Many adults, and most children, are missing out on some of the benefits of being physically active

Comparable benefits can be achieved through 75 minutes of vigorous intensity activity (such as running or sports such as swimming or football) spread across the week or a combination of moderate and vigorous intensity activity. All adults should aim to be active daily; muscle-strengthening activity (such as exercising with weights, dancing or carrying heavy groceries) should also be included on at least two days per week. Older adults at risk of falls should incorporate physical activity to improve balance and co-ordination on at least two days per week. Such activities may include tai chi or yoga. In addition, all adults are advised to avoid being sedentary for extended periods.

Figure 28: Levels of physical activity, men and women, England, 2012

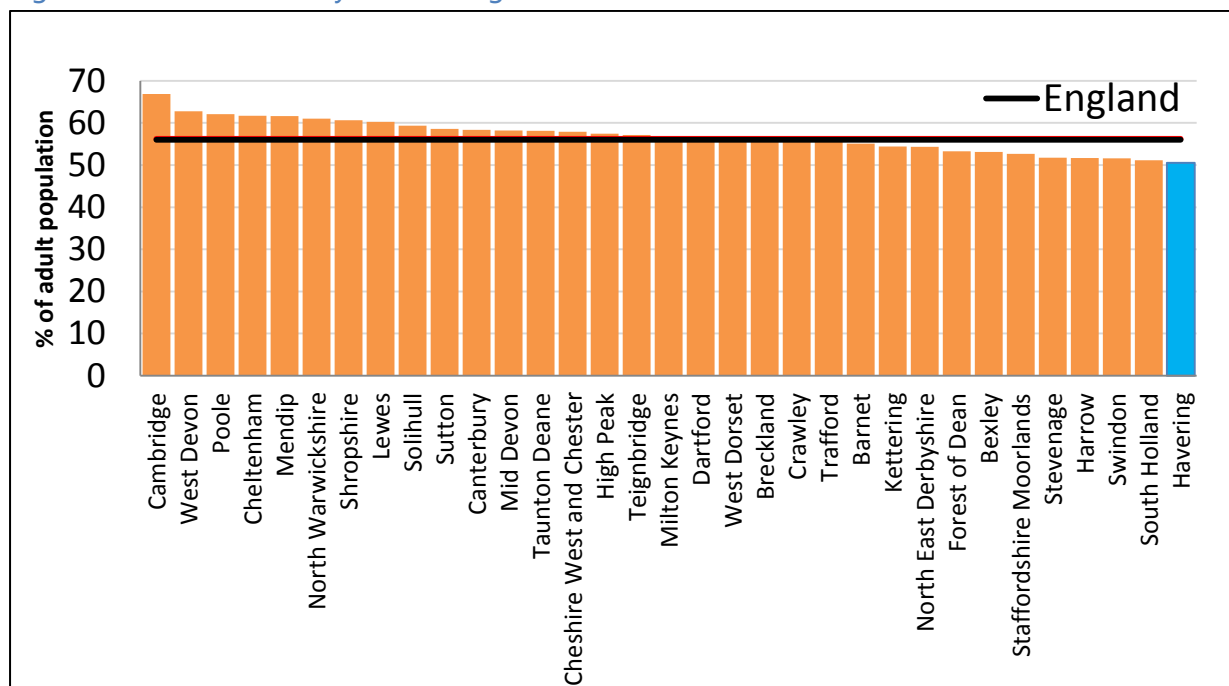


*150 minutes of moderate intensity physical activity per week.⁵⁸

Source: Household Survey for England (HSE), 2012

Data available at local authority level suggest that fewer adults in Havering (50.5%) meet recommended levels of activity than in England (56%) or London (56.2%) as a whole.

Figure 29: Rates of activity in Havering are also low relative to similar areas



Source: Public Health Outcomes Framework

Data presented are based on self-reported surveys. Studies using accelerometers to objectively measure levels of physical activity suggest that both men and women tended to over-estimate their levels of activity when self-reporting.

B. Children and young people

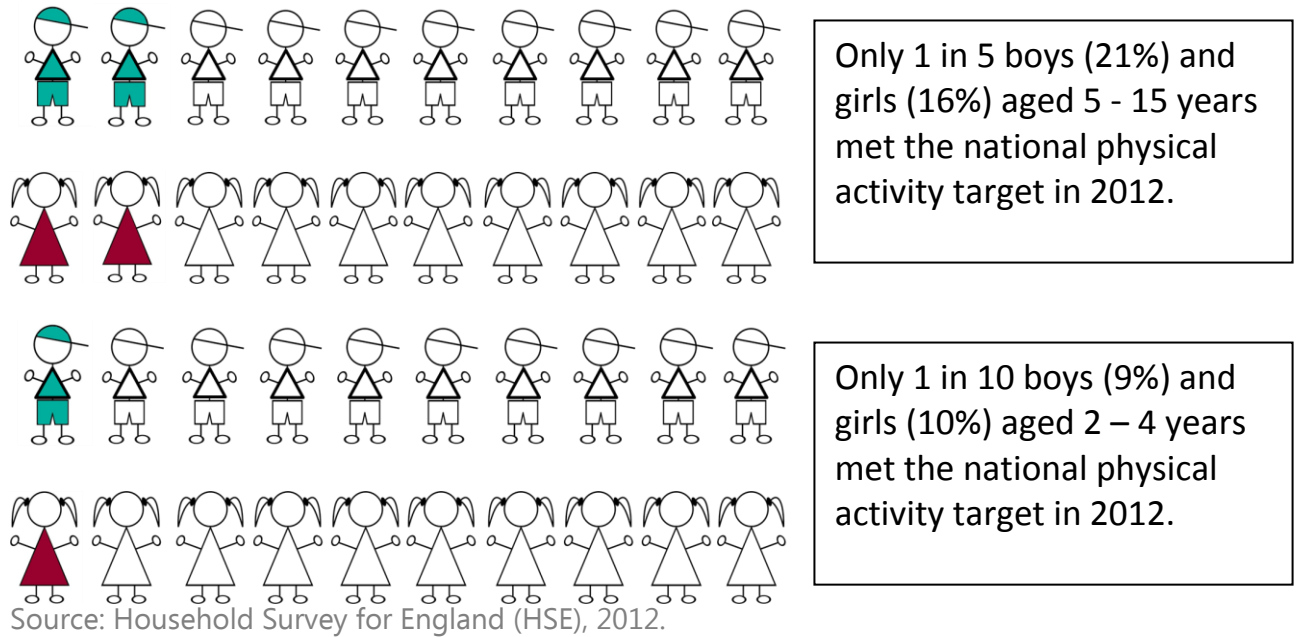
The recommended levels of physical activity for children are:

- Under-fives: 180 minutes (three hours) spread throughout the day, once a child is able to walk. For children who are not yet walking physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.
- 5–18 year olds: At least 60 minutes per day which should be a mix of moderate intensity aerobic activity, (for example walking to school or riding a bike) and vigorous intensity aerobic activity, (for example running, gymnastics and football).

Vigorous intensity activities strengthen muscle and bone and should be included at least three days a week. In addition, all children and adults are advised to minimise the time spent being sedentary for extended periods.

Children and young people should take part in activities that are appropriate for their age and stage of development.

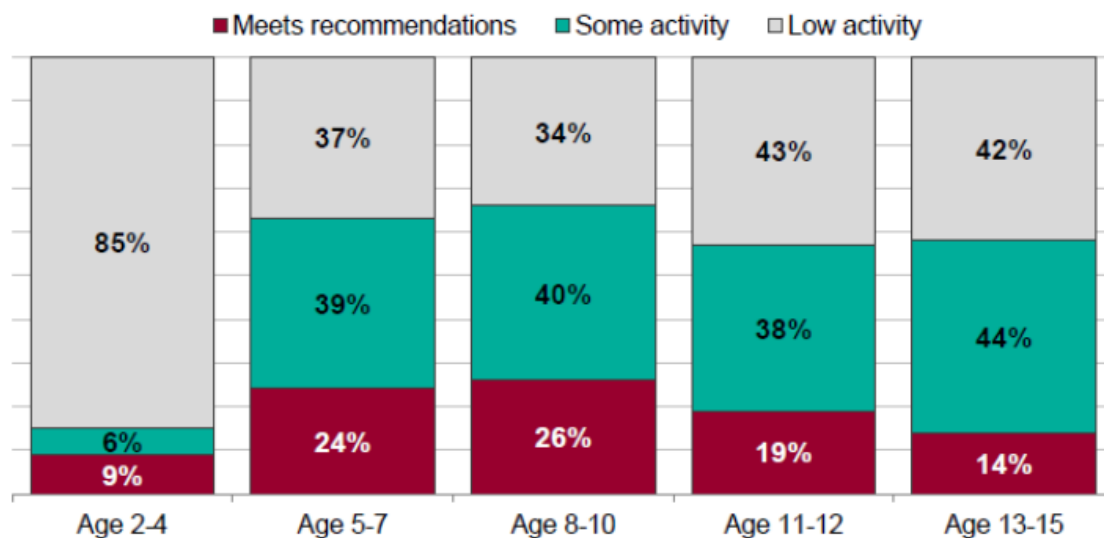
Figure 30: Levels of physical activity in children, England, 2012.



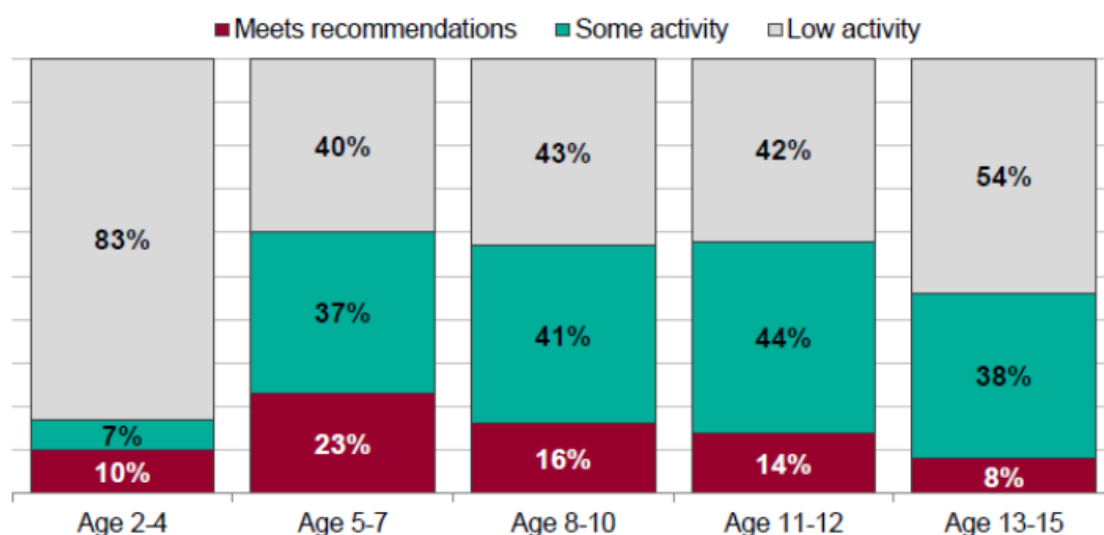
Levels of physical activity in children have been decreasing. Between 2008 and 2012, the proportion of children aged two to 15 years meeting recommended physical activity levels fell from 28% to 21% for boys and 19% to 16% for girls.⁵⁹

Figure 31: Proportion of children meeting government recommendations regarding levels of physical activity by age and gender, 2012.

Boys



Girls



Source: Health Survey for England 2012 Report*.
Excludes walking and cycling to/from school

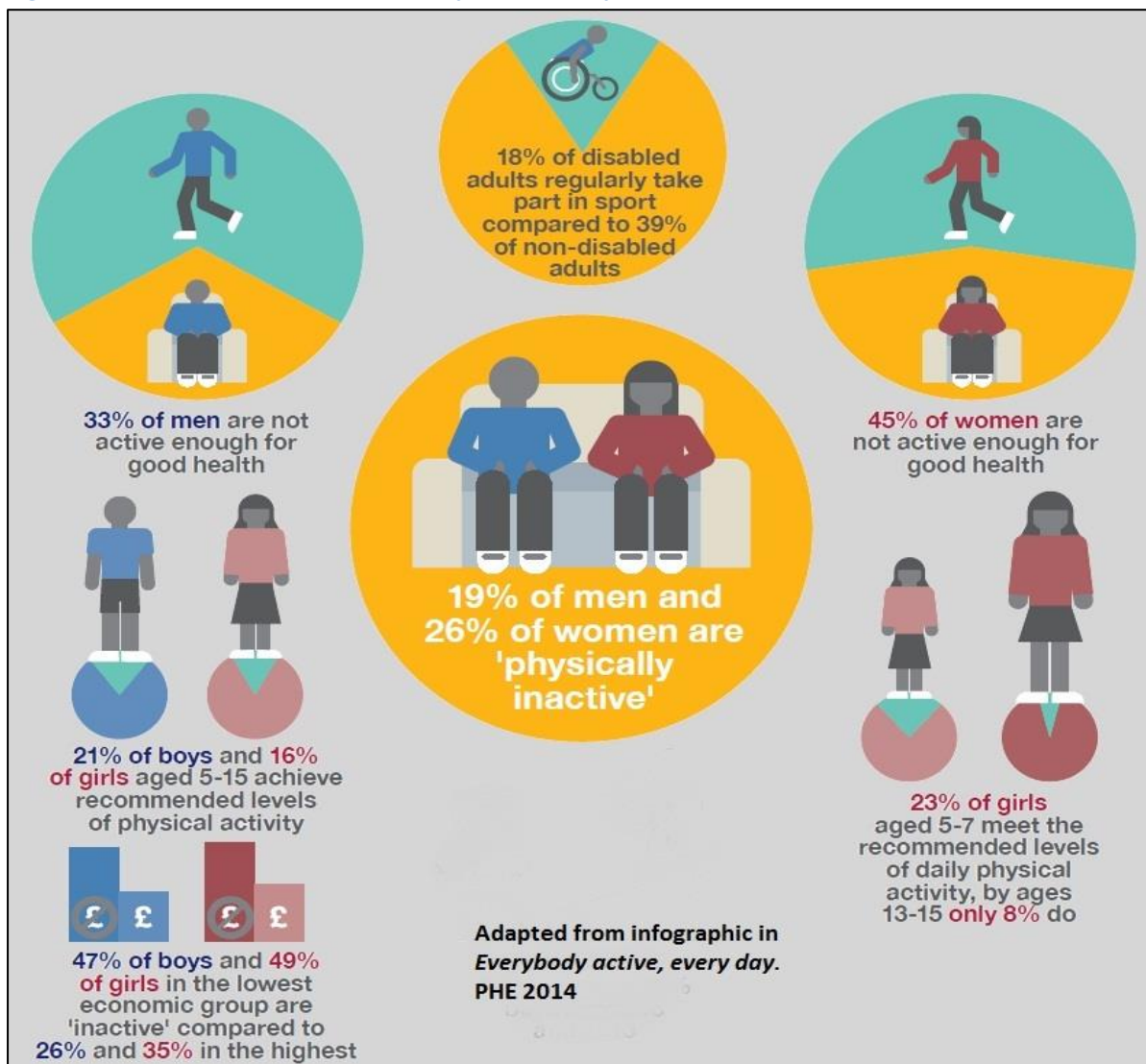
C. Inequalities in levels of physical activity

The benefits of physical activity are universal – more or less everyone would benefit from being more active. And yet there are systematic differences in physical activity levels between groups and communities that contribute to inequalities in health and wellbeing:

Age – Levels of physical activity decline with age to the extent that by the age of 75 years only one in ten men and one in 20 women are active enough for good health.⁶⁰ The process of ageing does require most of us to change our expectations of what we can do but it's

crucial that we remain confident in our ability to be physically active and aware of the continuing benefits of being so as we age. Not least because the benefits of being active e.g. in terms of reducing the risk of heart disease or injury from falls or social isolation are more immediate and tangible in old age.

Figure 32: Inequalities in levels of physical activity



Source: Health Survey for England, 2013

Disability – Disabled people are half as likely as non-disabled people to be active.⁶¹ Only one in four people with learning difficulties take part in physical activity each month compared to over half of those without a disability.⁶²

Ethnicity – Only 11% of Bangladeshi women and 26% of men are sufficiently active for good health compared with 25% and 37% respectively of the general population.⁶³

Gender – Men are more active than women in virtually every age group⁶⁴. Girls are less likely to take part in physical activity than boys, and participation drops even lower through the teenage years.⁶⁵

Sexual orientation and gender identity – Half of all lesbian, gay, bisexual and transgender people say they would not join a sports club, twice the number of their heterosexual counterparts.⁶⁶

Economic – People living in the least prosperous areas are twice as likely to be physically inactive as those living in more prosperous areas.⁶⁷

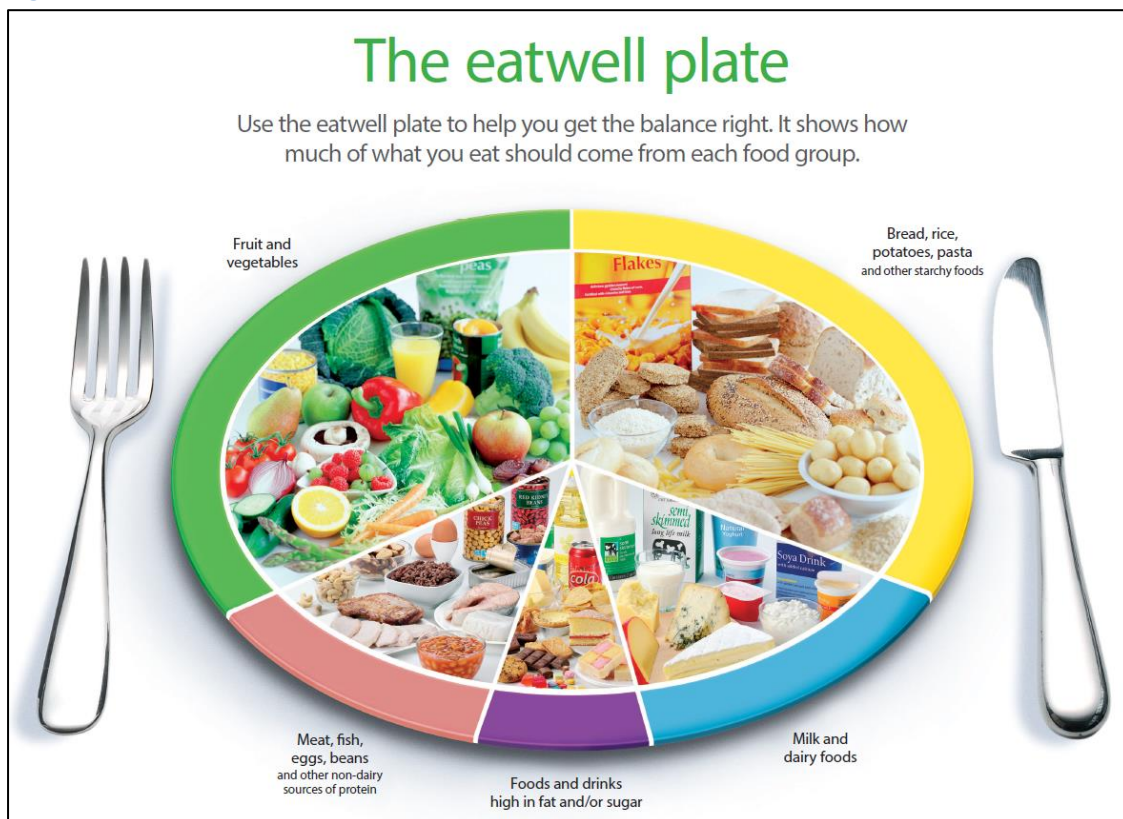
2.2 Healthy eating

2.2.1 Definition

UK guidance for children and adults is based on recommendations made by the Scientific Advisory Committee on Nutrition (SACN) for intakes of energy, nutrients plus some food groups, that are translated into population nutrient and food based guidance including advice for individuals such as the Eatwell Plate and the 5-a-day recommendation.

12% of deaths and £6billion of NHs costs would be avoided if everyone ate healthily

Figure 33: The Eatwell Plate



The Eatwell Plate depicts the different types of food that make up our diet, and shows the proportions we should eat them in to have a healthy, balanced diet. It is accompanied by 8 tips for healthy eating:¹⁵

- Base your meals on starchy foods
- Eat lots of fruit and vegetables
- Eat more fish
- Cut down on saturated fat and sugar
- Eat less salt
- Get active and be a healthy weight
- Don't get thirsty

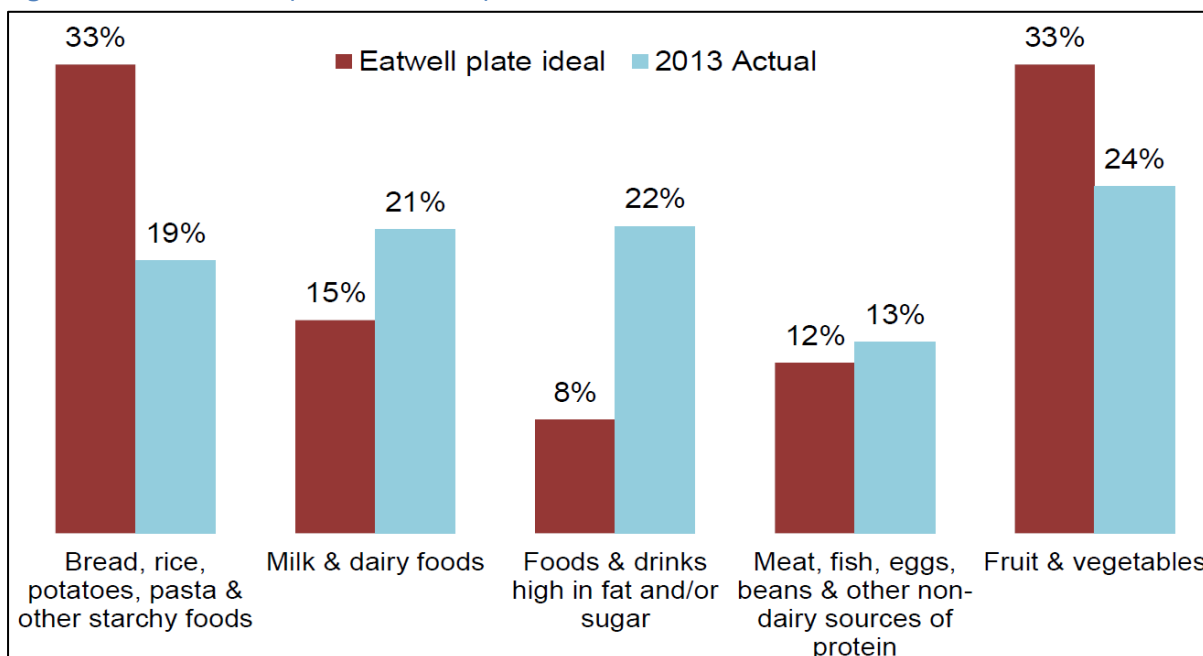
¹⁵ <http://www.nhs.uk/Livewell/Goodfood/Pages/eight-tips-healthy-eating.aspx>

- Don't skip breakfast

As well as composition, children and adults must understand the importance of portion size which varies depending upon age. Information, advice and resources which support the Eatwell Plate are provided via the Change4Life campaign and NHS Choices website. Poor nutrition results from eating an unbalanced diet in which one or more of a variety of nutrients are either lacking, in excess, or in the wrong proportions.

There is no reliable information about diet at local level. Across the UK, and evidenced by a comparison of actual food and drink purchases against the Eatwell plate ideal⁷⁴ (see Figure 34), most people consume more saturated fat, sugar and salt than they need, and less fruit, vegetables, dietary fibre, oily fish and some vitamins and minerals than recommended.^{68,69}

Figure 34: Household purchases compared to the Eatwell Plate ideal



Source: SACN and PHE

2.2.2 Energy Intake

An analysis of all aspects of diet is beyond the scope of this paper focused as it is on the prevention of obesity. With regard to obesity prevention, the most important aspect of nutrition is energy intake - as excess energy is converted and stored as fat, leading to obesity in the long term.

Energy content is usually measured in kilocalories¹⁶ (kcal) or the metric equivalent kilojoules (kJ).¹⁷ The energy we need to maintain our body weight depends on a range of factors, including our size and how physically active we are. As a guide, men on average need

¹⁶ Kilocalorie is often shortened to calorie.

¹⁷ 4.2kJ is equivalent to approximately 1kcal.

around 2,500kcal (10,500kJ) a day to maintain a healthy body weight, and women need around 2,000kcal a day (8,400kJ).

Energy intake is difficult to measure outside of strictly controlled laboratory settings, not least because people tend to systematically under report food consumption. Thus adults participating in the National Diet and Nutrition Survey reported a mean total energy intake of 2111 kcal/day for men and 1613 kcal/day for women which would suggest that the England should be in the grip of an epidemic of underweight rather than the converse.

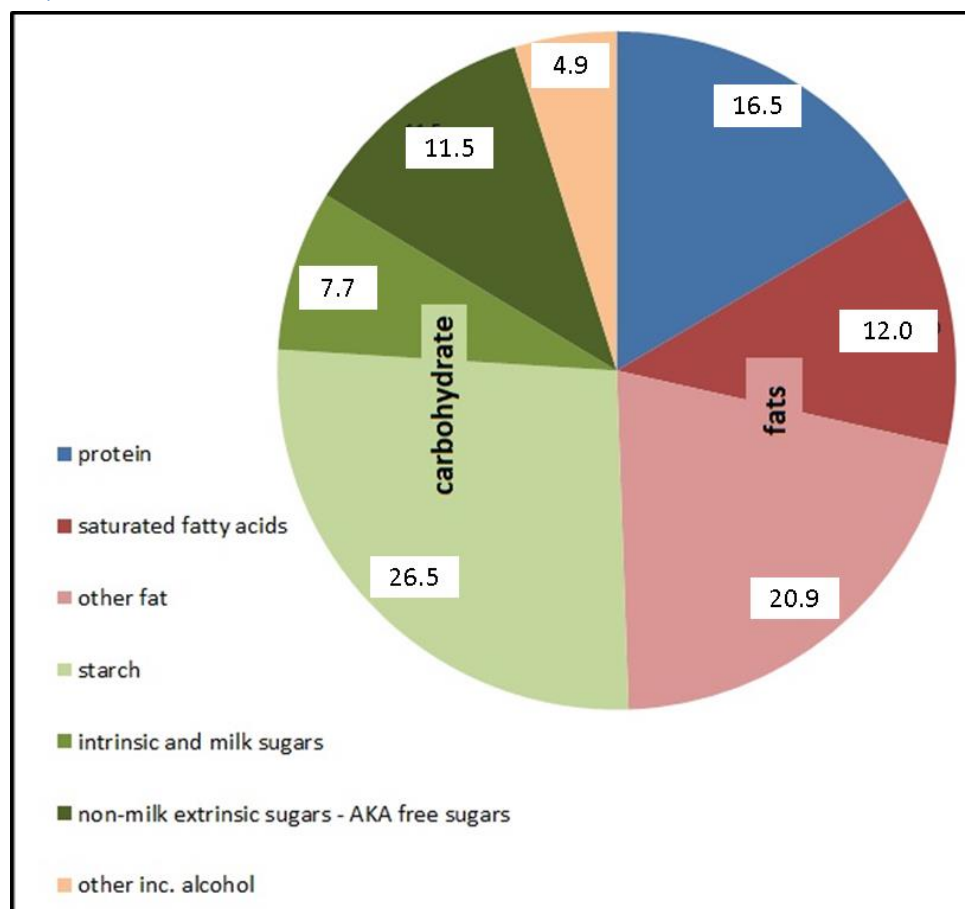
The current best estimate is that the average man and woman in England consume respectively 300 and 200 calories a day more than they need to maintain a healthy body weight. This is roughly equivalent to consuming four chocolate digestive biscuits (330 calories) or a 500ml standard bottle of sugar-sweetened carbonated drink (170 calories).⁷⁰

2.2.3 Sources of energy

Carbohydrates

Carbohydrates provide approaching a half of the total energy intake of adults in the UK with fats accounting for a further third.

Figure 35: Contribution of different food groups to total energy intake, adults aged 19-64, UK, 2008 - 2012



Source: [National Diet and Nutrition Survey. Results from Years 1,2,3 and 4 \(combined\) of the Rolling Programme \(2008/2009 – 2011/12\)](#)




Carbohydrates provide about a half of the energy consumed by UK residents. Consumption of starches is recommended over sugars. Hence particular attention has focused on foods with added sugars that are high in energy but few other nutrients – providing so called ‘empty calories’ devoid of nutritional value. Eating such energy dense foods can lead to weight gain and obesity. As a result, the Scientific Advisory Committee on Nutrition (SACN) has recommended that free¹⁸ or added sugars should make up no more than 5% of energy (calories) intake each day.⁷¹ A summary of this recommendation is shown in Figure 36.

“The evidence is stark – too much sugar is harmful to health and we all need to cut back. The clear and consistent link between a high-sugar diet and conditions like obesity and type 2 diabetes is the wake-up call we need to rethink our diet.

Cut down on sugars, increase fibre and we’ll all have a better chance of living longer, healthier lives.”

Professor Ian Macdonald, chair of the SACN Carbohydrates and Health working group

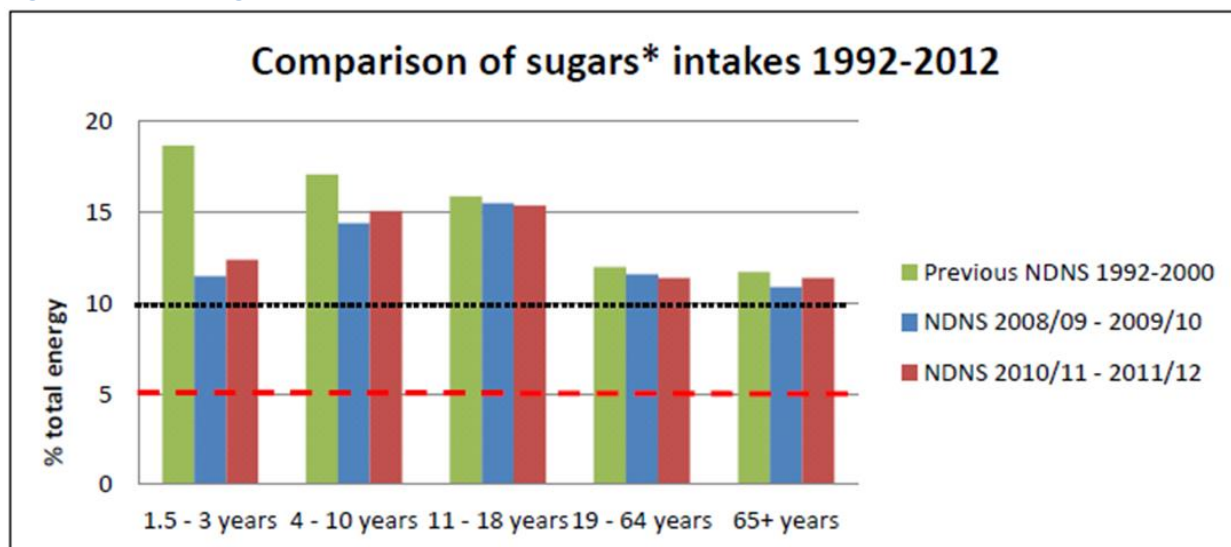
Figure 36: Recommended maximum intake of free sugars per day for adults and children

Age	Recommended maximum free sugars ^a intake, g per day ^b	Sugar cubes ^c
4-6 years	No more than 19g/day	5 cubes 
7-10 years	No more than 24g/day	6 cubes 
From 11 years, including adults	No more than 30g/day	7 cubes 

Data from the Nation Diet and Nutrition Survey show that consumption of free sugars is far above recommended levels with only 4% of children and 13% of adults meeting the recommendation.

¹⁸ Free sugars are sugars that have been added to a food and include those sugars naturally found in fruit juice, honey and syrups. They do not include sugars naturally found in milk and milk products nor in fruit and vegetables.

Figure 37: Free sugar intake over the period 1991 – 2012 for adults and children

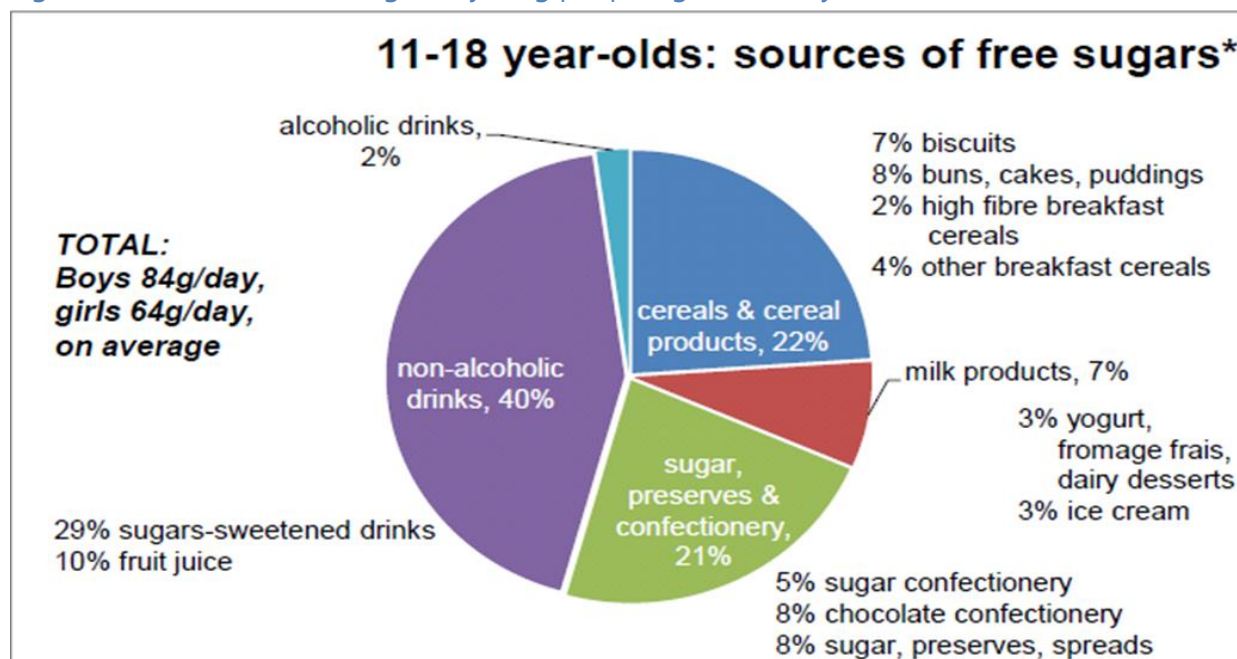


* Sugars intakes measured as non-milk extrinsic sugars; data from the National Diet and Nutrition Survey (NDNS) – surveys in the 1990s compared with the Rolling Programme 2008-2012; Source: Bates et al. 2014. Red dashed line is the new recommendation. Dotted black line is the previous (10% of total dietary energy) recommendation.

Source: PHE - reproduced from [Why 5%](#)

The main sources of free sugars are drinks and cereal products sweetened with sugars, confectionery, table sugar and fruit juice.

Figure 38: Sources of free sugars – young people aged 11- 18 years



* Sugars intakes measured as non-milk extrinsic sugars; data from the National Diet and Nutrition Survey (NDNS) Rolling Programme 2008-2012. Source: Bates et al 2014.

Source: PHE - reproduced from [Why 5%](#)

The Scientific Advisory Committee on Nutrition advise that efforts to minimise the consumption of sugar-sweetened drinks should be a particular priority – this is readily understandable given that a standard 330ml can of cola contains 35g of sugar and 29% of young peoples' intake of free sugar is from sugars sweetened drinks.

Fats

All types of fat are high in energy. Hence a diet high in fat is likely to predispose to obesity. Current UK government guidelines advise cutting down on all fats and replacing saturated fat with some unsaturated fat as there is good evidence that replacing saturated fats with unsaturated fats can help lower cholesterol¹⁹ levels and increase the ratio of 'good' cholesterol (HDL) to 'bad' cholesterol (LDL).

About a third of energy intake is in the form of fats which is not grossly different to current recommendations. However, most people in the UK eat too much saturated fat.⁷²

Alcohol

Alcohol in the diet contributes to energy intake and therefore, in addition to other poor health outcomes impacts on obesity. Many people are not aware of the calories contained in alcoholic drinks and in addition alcohol consumption can lead to an increase in food intake. Heavy, but less frequent drinkers seem to be at higher risk of obesity than moderate, frequent drinkers.

Fruit and vegetables

Fruit and vegetables have many significant health benefits. In the context of obesity, they are relatively bulky, with a low-energy content, helping satisfy hunger whilst minimising energy intake. Despite the widespread '5-a-day' message, only about a ¼ of adults do so and the proportion has fallen in recent years⁷³ as has the purchase of fruit and vegetables⁷⁴. 52.3% of adults in Havering report eating five portions of fruit and vegetables on the day before they were surveyed compared with 56.3% nationally.⁷⁵

Estimates for consumption of fruit and vegetables by children aged 11-18 years have remained consistent between 2008 to 2012 at an average of 2.9 portions per day.⁶⁹

2.2.4 Healthy eating and children and young people

Nutrition impacts on the health of children from conception onwards - both maternal under- and over-nutrition around the time of conception and during pregnancy increases the risk of childhood obesity.

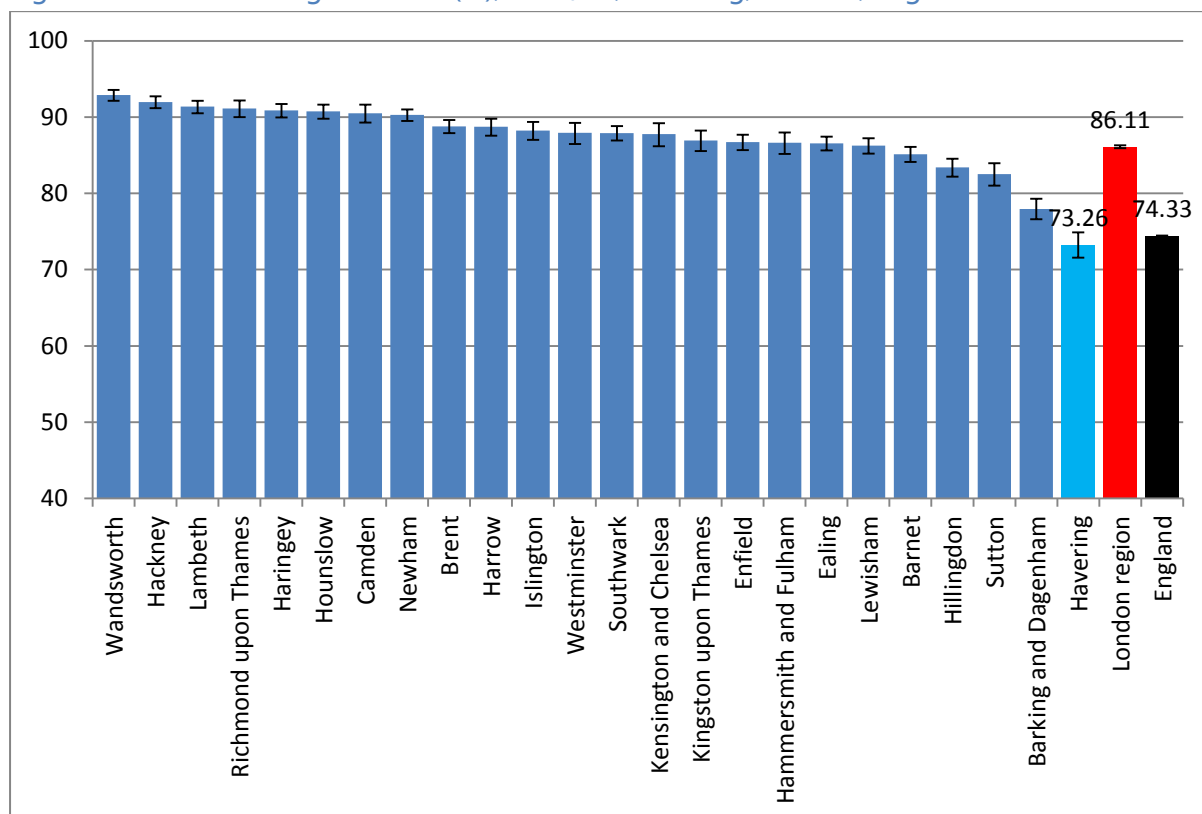
¹⁹ Cholesterol is mostly made in the liver from any type of fat you eat. It's carried in the blood in two ways: as low density lipoprotein (LDL) and high density lipoprotein (HDL). Too much LDL cholesterol can lead to fatty deposits developing in the arteries, which can restrict the flow of blood to the heart and brain, increasing the risk of heart disease and stroke. On the other hand, HDL cholesterol has a positive effect by taking cholesterol from parts of the body where there is too much of it, to the liver, where it is disposed of.

Pregnant women are advised to consume only an additional 200 kcal/day in the last trimester - definitely not to 'eat for two' - and take at least 30 minutes/day of moderate intensity physical activity.

Babies that are breastfed are less likely to become obese⁷⁶ as well as benefitting in a variety of other ways²⁰. Rates of breastfeeding initiation in Havering (73.3%) are similar to the national average (74.3%) but significantly lower than the London average (86.1%) and the lowest for any London borough (See Figure 39). The duration of breastfeeding in Havering is a particular concern with only 4 out of 10 babies being breastfed at 6-8 weeks which is significantly below the average for London and England (See Figure 40).

Delaying weaning until babies are at least six months old reduces the likelihood of obesity. The Dept. of Health and UNICEF recommend the best baby food is homemade from simple ingredients with no added sugar or salt, and incorporates different textures.⁷⁷ Young children are increasingly exposed to highly processed, energy-dense foods that are high in sugar, salt and saturated and trans-fats. This is important to note, as taste preferences and appetite regulation are set in infancy.

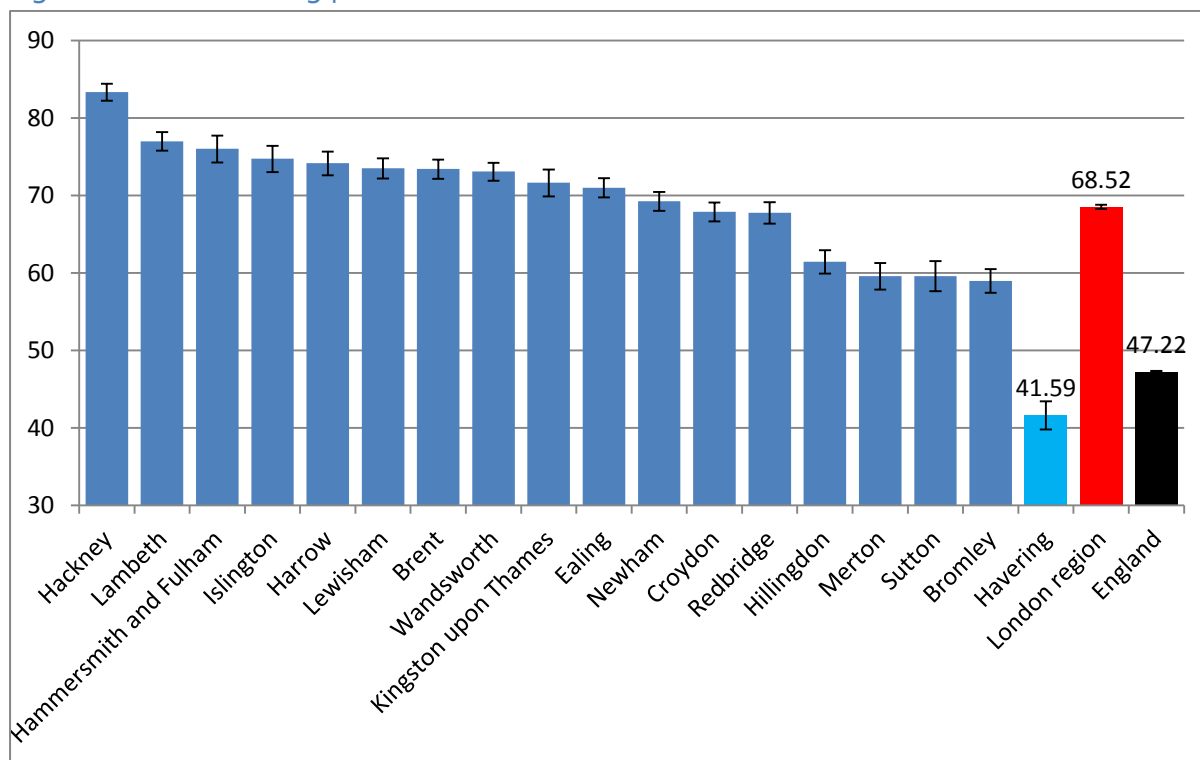
Figure 39: Breastfeeding initiation (%), 2014/15, Havering, London, England



Source: PHOF accessed October 2015. NB. Rates not reported for boroughs with data quality issues.

²⁰ Breastfed babies are less likely to develop lower respiratory tract infections, gastrointestinal infections, and otitis media; less likely to be the victim of sudden infant death and likely to have better cognitive and behavioural outcomes.

Figure 40: Breastfeeding prevalence at 6-8 weeks after birth, 2012/13



Source: PHOF accessed October 2015

NB. More up-to-date data for Havering and many other areas have not been published due to quality issues.

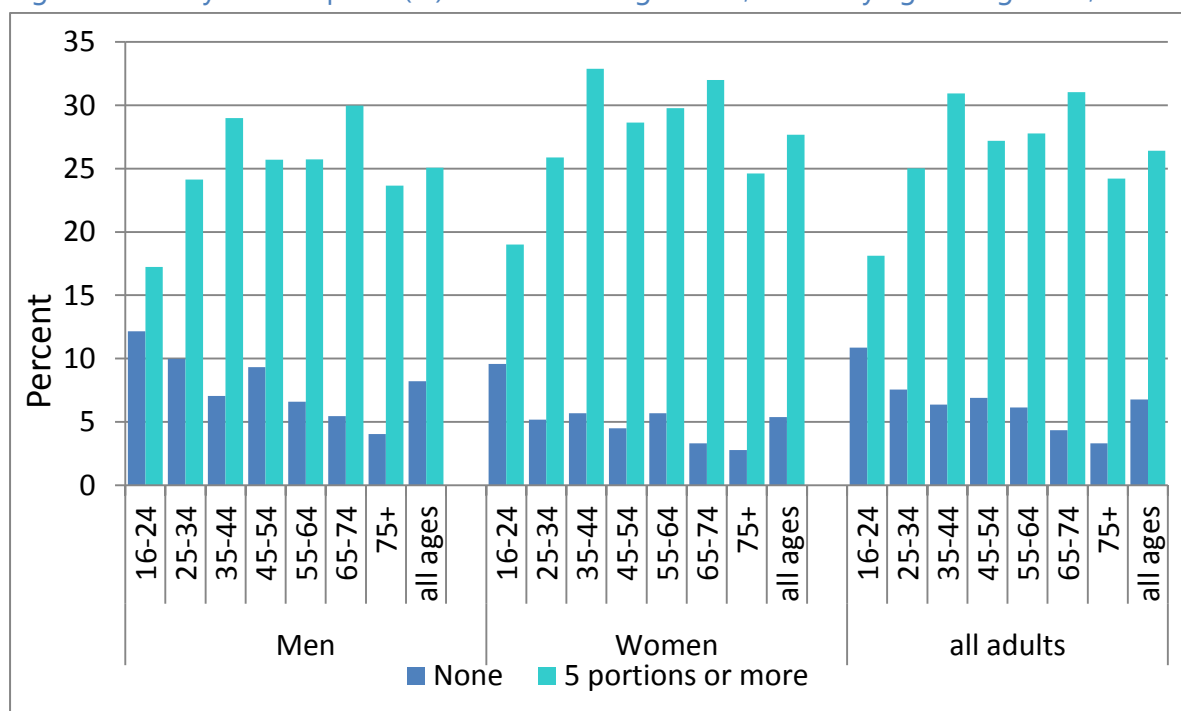
Observational studies suggest that the rise in obesity among very young children in the UK was largely restricted to the minority with obese parents. Toddlers as a whole have not changed. By contrast, obesity among adolescents has increased across the entire age group. The data suggest that parenting and / or fetal programming have a fundamental influence on weight gain in the early years, whereas more general (peer-group) influences take over later on.⁷⁸

2.2.5 Inequalities in healthy eating

Age

Consumption of free sugars by all age groups exceeds the recommended value but most notably for children aged 4 to 10 years and 11 to 18 years. There is a general trend towards younger people eating less fruit and vegetables than the current older generation.⁷⁹

Figure 41: Daily consumption (%) of fruit and vegetables, adults by age and gender, 2013



Source: Health Survey for England 2013

Disabilities

Less than 10% of adults with learning disabilities in supported accommodation eat a balanced diet, with an insufficient intake of fruit and vegetables. Carers generally have a poor knowledge about public health recommendations on dietary intake.⁸⁰

Ethnicity

There are considerable variations in dietary patterns across and within ethnic groups:

- Compared with White Europeans, children from South Asian ethnic groups reported higher mean total energy intake.
- Black African and Black Caribbean children had lower fat intakes, and this was particularly marked among Black African children.
- Apart from Indians, adolescents from minority ethnic groups are more likely to engage in poor dietary behaviours than White adolescents, with those born in the UK and girls being most susceptible. Black Caribbean and Black African adolescents were the most likely of all groups to skip breakfast and engage in other poor dietary practices.

These eating patterns are influenced by many factors including availability of food, level of income, health, food beliefs, dietary laws, religion, cultural patterns and customs. Additional factors include age (and in particular, generation), region of origin and occupation.⁸¹

Social and economic disadvantage

There is evidence that people from more disadvantaged groups tend to have poorer diets, particularly with respect to fruit and vegetable consumption.^{69,82} However, there is no consistent pattern across income groups for overall energy intakes.⁸³ However, this could in

part be due to confounding effect of greater under nutrition amongst disadvantaged communities.

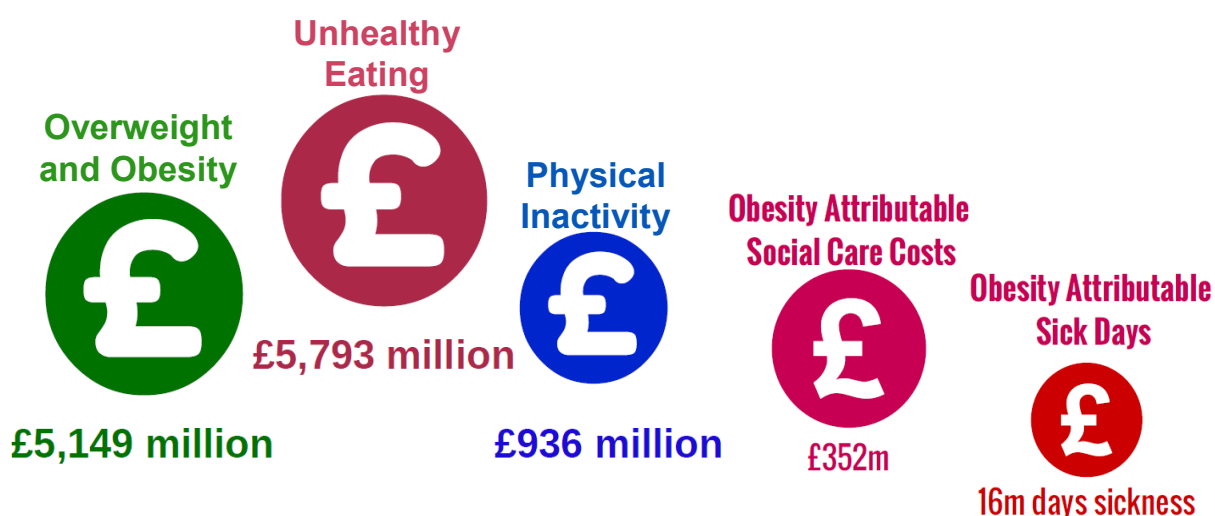
12.9% of children in Havering are eligible for and claiming free school meals (FSM); less than the average for London (21.2%) and England (16.0%). At school level the proportion varies from 1.9% to 46.8%. Whilst these children are able to claim a free meal each day during term time, 'holiday hunger' remains a concern.

Cheaper food sources tend to be more energy-dense and nutrient-poor, providing plentiful calories, especially in the form of fats and sugars, but relatively low levels of vitamins and minerals.⁸⁴ Low income and area deprivations are barriers to purchasing fresh or unfamiliar foods.⁸⁵ Conversely, there is a strong positive association between density of fast food outlets and deprivation so that residents of more deprived areas have easier access to what is cheap, highly palatable and energy-dense food.

2.2.6 The benefits of healthy eating

It is estimated that if diets matched nutritional guidelines in all respects, around 70,000 deaths in the UK, equating to 12% of total deaths, could be prevented each year.⁸⁶ With a reduction in the of treating conditions caused by poor diet which is around £6 billion per year, over and above the cost of overweight and obesity⁸⁷.

Figure 42: Financial consequences of obesity, unhealthy eating and physical inactivity



Source: Scarborough et al. 2011

3. The obesity epidemic: the drivers and how we should respond?

This section outlines the factors behind the increase in obesity levels and how these might be addressed.

1. Drivers of increasing obesity

2. Responses to reduce obesity

3.1 Drivers of increasing obesity

As obesity is fundamentally the result of an imbalance between energy intake and energy expenditure; it's tempting to believe that the increase in obesity can be addressed by shifting decisions at the level of the individual. However, the authors of the Foresight Report *Tackling Obesities*⁸⁸ identified a variety of issues that militate against the individual successfully maintaining long term changes to their diet and level of physical activity to achieve a healthy body weight:

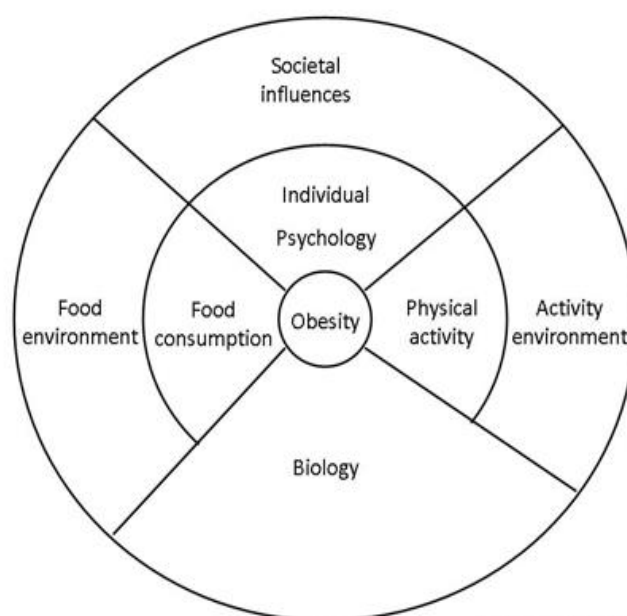
- **primary appetite control in the brain** – is insufficient to maintain balance given a surfeit of energy dense food and reducing requirement for physical activity
- **dietary habits keep individuals from adopting healthier alternatives** – an array of factors serve to reinforce 'unhealthy' dietary habits including the need for more time or convenience; the desire to reduce stress; the availability of greater choice, and the desire for short-term rewards or compensations
- **physical inactivity** – everyday living entails ever reducing levels of activity – which are insufficient to avoid obesity or accrue the other protective benefits of physical activity.
- **psychological ambivalence** experienced by individuals in making lifestyle choices – currently there are insufficient personal and / or societal drivers to push the majority to take and maintain the conscious actions needed to offset the passive factors driving obesity.

The Foresight team concluded that whereas we evolved in a world of relative food scarcity and hard physical work, we live in a world where energy-dense food is abundant and labour-saving technologies abound. As a result, the interaction between human biology, psychology and our environment is such that most of us are now predisposed to gaining weight.

Therefore action is needed to address the environmental and societal factors that contribute to 'passive' obesity to assist the individual – who may also benefit from support to initiate and maintain conscious behaviour change.

To maximise the chances of success we must address all the elements identified in the Foresight systems map (see below); focusing on one element of the system will not bring about the scale of change required; however taken together, their complementary and reinforcing action may achieve the significant shift in population obesity levels required.

Figure 43: Foresight systems map



Source: Foresight systems map, 2007

'Healthy lives: a call to action on obesity in England'⁸⁹ is the most recent statement of national policy regarding obesity. It confirmed that '*the analysis of the causes of excess weight and recent increases, as set out in the Foresight report, holds good*'.

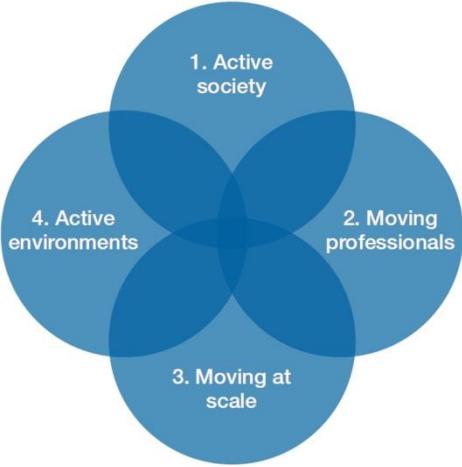
3.2 Responses to reduce obesity

The main components of the Government's approach to reverse the increase in obesity were as follows:

- Empowering individuals – through the provision of guidance, information, encouragement and tailored support on weight management (at local level), and backed by application of insights from behavioural science.
- Giving partners the opportunity to play their full part – e.g. by building on the part that the food and drink industry can play through the Responsibility Deal, particularly in relation to helping to reduce our collective calorie intake, and developing a greater role for business and other partners in Change4Life and its wide supporter base²¹.
- Giving local government the lead role in driving health improvement and harnessing partners at local level.
- Building the evidence base, spreading good practice and full use of evidence.

²¹ Central government was clear that from an ideological standpoint it favoured less intrusive interventions focused on equipping people to make the best possible choices rather than directly intervening to change those choices. Subsequently, PHE have published a report on effective approaches to reducing intake of free sugars (see Section 0) which supports more direct intervention by central government which may / may not reshape policy when a revised national obesity strategy is published in early 2016.

PHE has also published its strategy to increase levels of physical activity - Everybody active, everyday⁹⁰. It identifies four themes that should underpin efforts to increase levels of physical activity:

<p>Active society: creating a social movement so that being active is viewed as not just fulfilling and fun but also the easy and obvious choice by the population at large</p>	
<p>Moving professionals so that the hundreds of thousands of public-facing staff and volunteers are mobilised to influence and motivate the population</p>	
<p>Active environments: creating the right spaces so that the environment in its widest sense from parks to the high street and the transport links that connect residents to the services they need make being active the default option.</p>	
<p>Moving at scale: scaling up the interventions that make us active. We must move from small scale interventions to changing the things that affect us all – our environment; how we travel from A to B, the way local schools educate our children etc. So the question is less about investment in specific services but rather how the totality of existing assets can be redirected to support healthier living.</p>	

PHE suggested 5 immediate priorities for local action: -

- Teach every child to have and enjoy the skills to be active every day
- Create safe and attractive environments where everyone can walk or cycle, regardless of age or disability
- Make every contact count for professionals and volunteers to encourage active lives
- Lead by example in every public sector workspace
- Evaluate and share the findings so the learning of what works can grow

All 3 documents are consistent with one another and advocate a similar course of action – which can be followed by local partnerships.

To prevent people becoming obese, and increase levels of physical activity and healthy eating we should:

- reduce the **environmental** and **societal factors** that contribute to passive obesity and replace them with 'cues' or 'nudges' for healthier choices
- **work to make more people perceive obesity, healthy eating and physical activity to be issues** that affect them personally and thereby increase public demand for significant action and design options for healthy behaviour

- and **prompt residents to take up the available opportunities** to be more active and eat more healthily

We should **focus on early years** as weight is difficult to lose once gained and the attitudes and behaviours established in childhood serve to shape our lifestyle in later life.

Lastly, we should seek to remedy the **inequalities** regarding obesity, physical activity and diet that affect specific communities and population groups.

Specialist health improvement and / or treatment services will have a role in supporting high risk individuals to achieve improvements in nutrition, physical activity and weight. However, we must acknowledge that their impact on the prevalence of obesity across the population as a whole is modest and therefore they are not central to our approach at population level.

Existing activity and assets related to each of these priorities is described in the next section.

4. Promoting healthy eating and physical activity to prevent obesity: assets and opportunities

This section describes the opportunities that exist to prevent obesity by promoting healthy eating and increased physical activity:

- shaping the physical activity environment
- shaping the food environment
- creating a healthy community
- supporting individuals to change
- giving children the best possible start
- tackling inequalities in obesity

1. Shaping the physical activity environment

Healthy street scene
Public transport
Green space
Cyclability
Road design

2. Shaping the food environment

Community
Organisations
Consumers

3. Creating a healthy community

Leadership
Healthy working places
Public sector premises
Health impact in decision making
Wider workforce
Voluntary and community sector
Business sector

4. Supporting individuals to change

Health improvement campaigns
NHS Health Checks
Weight management Services

5. Giving children the best possible start

Preconception and pregnancy
Breastfeeding
Weaning
Parental cooking skills
Early years child care providers
Schools
Other assets

4.1 Shaping the 'physical activity' environment

4.1.1 Creating a healthy street scene

For many people walking and to a lesser extent cycling, whether for pleasure or travel purposes represent the most likely sustainable form of physical activity. [Transport for London \(TfL\)](#) make the case that residents are more likely to walk when commonly used amenities are relatively close by and the street scene is 'inviting'. From this they have developed the concept of a **healthy street** environment (see graphic below).

Figure 44: Indicators of a healthy street environment



Source: TfL

The Council fosters ever healthier streets in a variety of ways e.g.

- through structural improvements to the street scene,
- high standards of street cleaning and maintenance
- by using spatial planning to ensure new housing is well served by public transport and has a range of high quality amenities in walking distance
- by encouraging new enterprises to locate to local centres etc.

Creating 'healthy streets' involves a number of Council Services and in supporting higher levels of physical activity also delivers cleaner air, less noise, more connected neighbourhoods, less stress and fear, and fewer road traffic injuries. Moreover, local small enterprises benefit from an increase in business. The obvious example being the recent award winning revamp of [Hornchurch Town Centre](#).

The Council supports the [Legible London Wayfinding](#) initiatives, and has installed way finding signs in the Romford area that identify the direction and distance to facilities on foot.

4.1.2 Improving the public transport offer in the borough

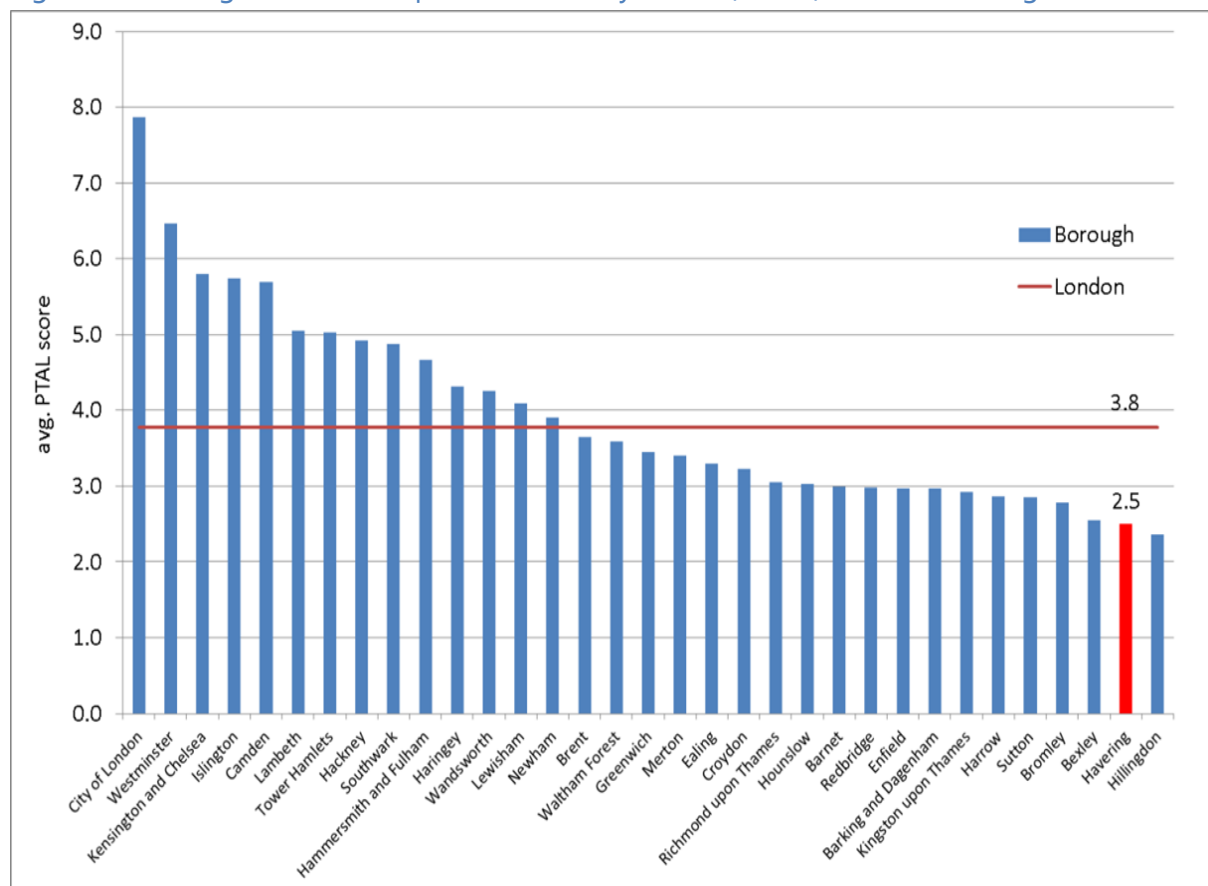
A key element of any plan to increase levels of physical activity has to be the promotion of **public transport**. A quarter of Londoners already get their recommended daily physical activity as part of a longer commute by public transport. Havering has the lowest % of commuting by public transport of any London borough. An increase in the proportion of residents choosing to use public transport would translate into increased levels of physical activity and yield other benefits e.g. reductions in congestion, air pollution and traffic noise. Reductions in levels of traffic would make walking and cycling more attractive options, contributing to a virtuous circle.

Havering has a variety of public transport options:

- Bus services - Havering is served by over 30 bus routes and many of them provide good links with Romford station and its services to central London and other regional destinations.
- Underground - Havering is served by four stations on the District Line. They are Hornchurch, Upminster Bridge, Elm Park and Upminster.
- National Rail Services - Greater Anglia services operate through the borough linking London Liverpool St with Southend Victoria and many destinations in East Anglia. Romford is the main station and local services also serve stations at Gidea Park and Harold Wood. A shuttle service links Romford with Emerson Park and Upminster where they connect with the District line and c2c services. c2c operates between London Fenchurch Street and Southend Central (and Shoeburyness) via Upminster and also via the 'Tilbury loop' route that serves Rainham station. A branch line operated by c2c links Upminster with Lakeside and the 'Tilbury loop' route. In the near future, Havering will benefit from the Crossrail project which will provide better and more efficient rail links between Havering, Heathrow Airport, the West End, the City of London and Canary Wharf. The eastern branch of Crossrail (north of the Thames) will serve three stations in Havering – Harold Wood, Gidea Park and Romford.

Despite this infrastructure, Havering has the 2nd lowest average Public Transport Accessibility Levels (PTALS) in the capital. PTALS are a detailed and accurate measure of the accessibility of a point to the public transport network, taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport network at any location within Greater London. The PTAL is categorized in 6 levels, 1 to 6 where 6 represents a high level of accessibility and 1 a low level of accessibility. Levels 1 and 6 have been further sub-divided into 2 sub-levels to provide greater clarity. The average score for Havering is 2.5 compared with a London wide average of 3.8 and large areas of the borough are at PTAL 1 or 2.

Figure 45: Average Public Transport Accessibility Levels (PTALs), London Boroughs, 2012



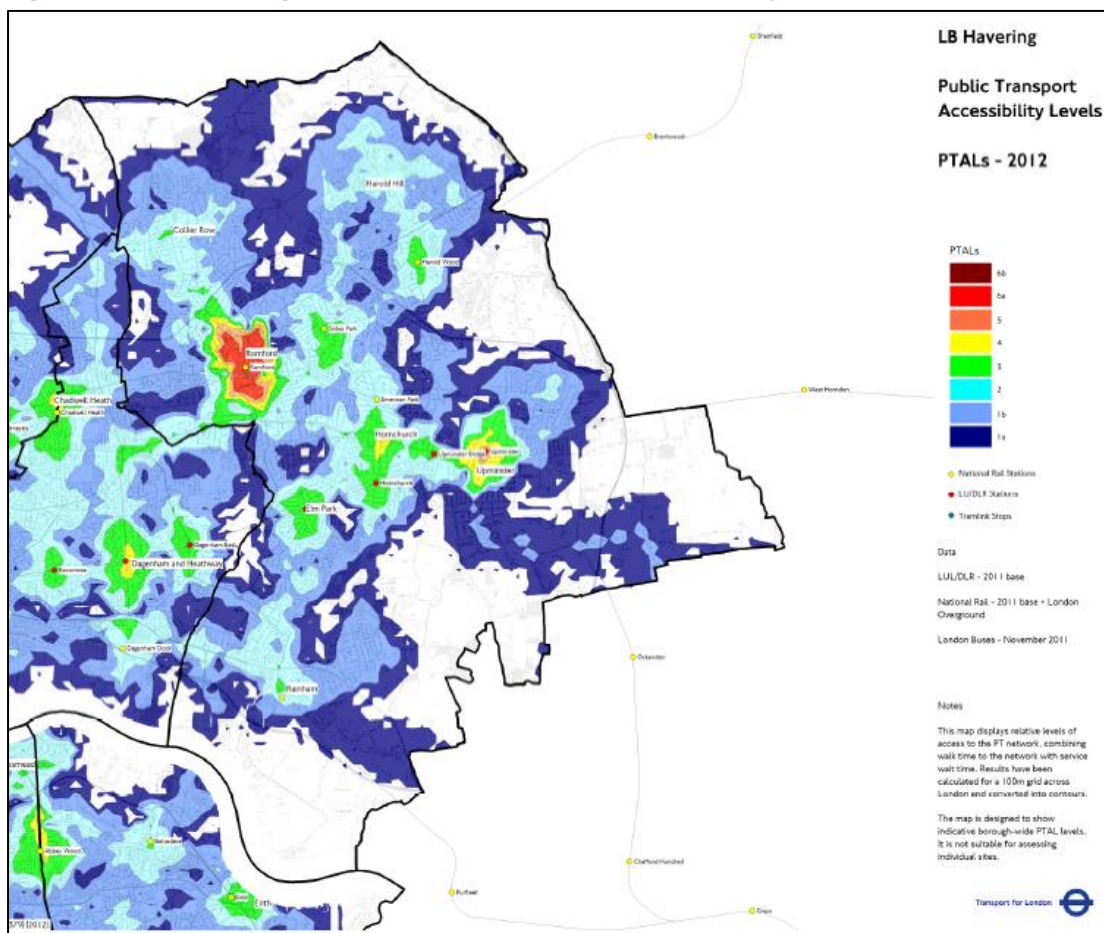
Source: TfL

The Council and TfL have a number of priorities for public transport including:

- Romford Station – improvements with Crossrail
- New station at Beam Park to serve London Riverside area
- Rainham regeneration
- Improved north-south bus links and better links between hospitals

Such improvements in the public transport infrastructure are essential if dependency on the car is to be reduced and levels of physical activity increased.

Figure 46: LB Havering, Map of Public Transport Accessibility Levels, 2012.



Source: TfL

4.1.3 Maintaining and improving access to high quality green space

Parks and green spaces provide safe and attractive spaces in which to walk, cycle and play. Access to good quality green space is associated with a range of positive health outcomes including better self-rated health; lower body mass index scores, overweight and obesity levels; improved mental health and wellbeing and increased longevity in older people. In addition, research shows that access to green space may partly mitigate income-related inequality in health.⁹¹

Havering as a whole has a large number of [parks and open spaces](#), which make it one of the greenest boroughs in the capital.

Table 7: Proportion of area under green space

Indicator	Havering	Outer London	London	National comparator
% of area that is green space, 2005	59.3	42.5	38.3	87.5

Source: CLG

The Green Flag Award is the benchmark national standard for parks and green spaces in the United Kingdom. Nine Havering parks currently have the Green Flag Award:

- Bedfords Park, Havering-atte-Bower
- Cottons Park, Romford
- Harold Wood Park, Harold Wood
- Hylands Park, Hornchurch
- Lawns Park, Collier Row
- Lodge Farm Park, Romford
- Raphael Park, Romford
- St Andrews Park, Hornchurch
- Upminster Park, Upminster



The Borough also contains a number of [nature reserves](#), including a designated Site of Special Scientific Interest.

Preservation and maintenance of parks and green spaces is undertaken with the support of community groups and volunteers providing the opportunity and motivation for interested local residents to be active. A range of facilities are available including cafes, children's play areas, multi-use games areas, tennis courts and skateboard ramps. As a result, the majority of residents have good access to [playgrounds and outdoor gym facilities](#).

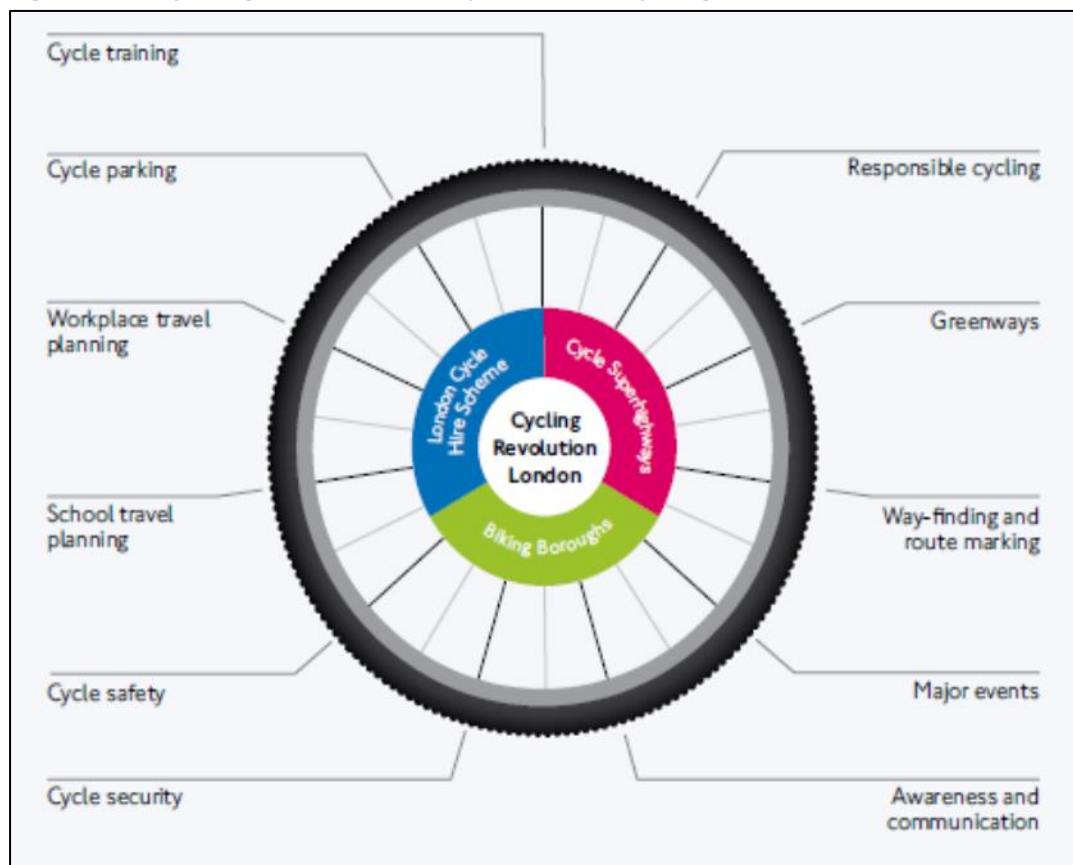
Increasing the use of good quality green space for all social groups is likely to improve health outcomes and reduce health inequalities. It can also bring other benefits such as greater community cohesion and less social isolation.

Local authorities play a vital role in protecting, maintaining and improving local green spaces and can create new areas of green space to improve access for all communities.

4.1.4 Improving the 'cyclability' of Havering

Cycling improves cardiovascular health, is kind to joints and is associated with increased longevity. However, relatively few people in Havering cycle compared with other London boroughs. The TfL document [Cycling Revolution London](#) sets out how cycling can be promoted across the capital and at borough level in part by increasing the 'cyclability' of the road network (see Figure 47).

Figure 47: Key programmes and projects of the Cycling Revolution



Source: TfL

Since early 2012, Havering has been a 'Biking Borough' and is actively addressing barriers to cycling through this Mayoral initiative. [Considerable activity](#) is underway to increase rates, supported by £600K funding from TfL.

Havering currently has 68km of cycle routes which are either London Cycle Network or 'Greenways' routes. In addition, the Ingrebourne Valley Sustrans Connect 2 project runs through Havering from Noak Hill to Rainham Marshes, and the shared use Rainham to Purfleet path has opened up large areas of the Marshes to public access by foot or cycle for the first time.

The Council holds regular bike [security marking](#) in Romford Market, [led rides](#) around the area are held for both beginners and enthusiasts, as well as a variety of [riding](#) and [maintenance](#) courses. [Local clubs and organisations](#) provide further encouragement and opportunities. The cycle to work scheme is available to Council employees to assist with the cost of buying a bike. In addition, the Council offers [incentives to employers](#) in the borough to help them to help their employees to cycle.

4.1.5 Facilitating physical activity through road design

Actual and / or perceived safety influences decisions about whether individuals choose to walk or cycle or whether parents allow their children to do so. Road design, including the

use of 20mph limits in priority areas, reduces the likelihood of accidents and their severity should they occur. The introduction of 20mph speed limits should be supported with education and publicity, appropriate road engineering measures, and enforcement activities. Alternatively, segregation of walkers and cyclists from motor vehicles improves safety and encourages active travel.

4.2 Shaping the food environment

Central to tackling obesity and other diet-related poor health outcomes is creating an environment where it is normal, easy and enjoyable to eat healthily.

Environmental variables that have an influence on eating patterns can be grouped into four overlapping areas⁹²:

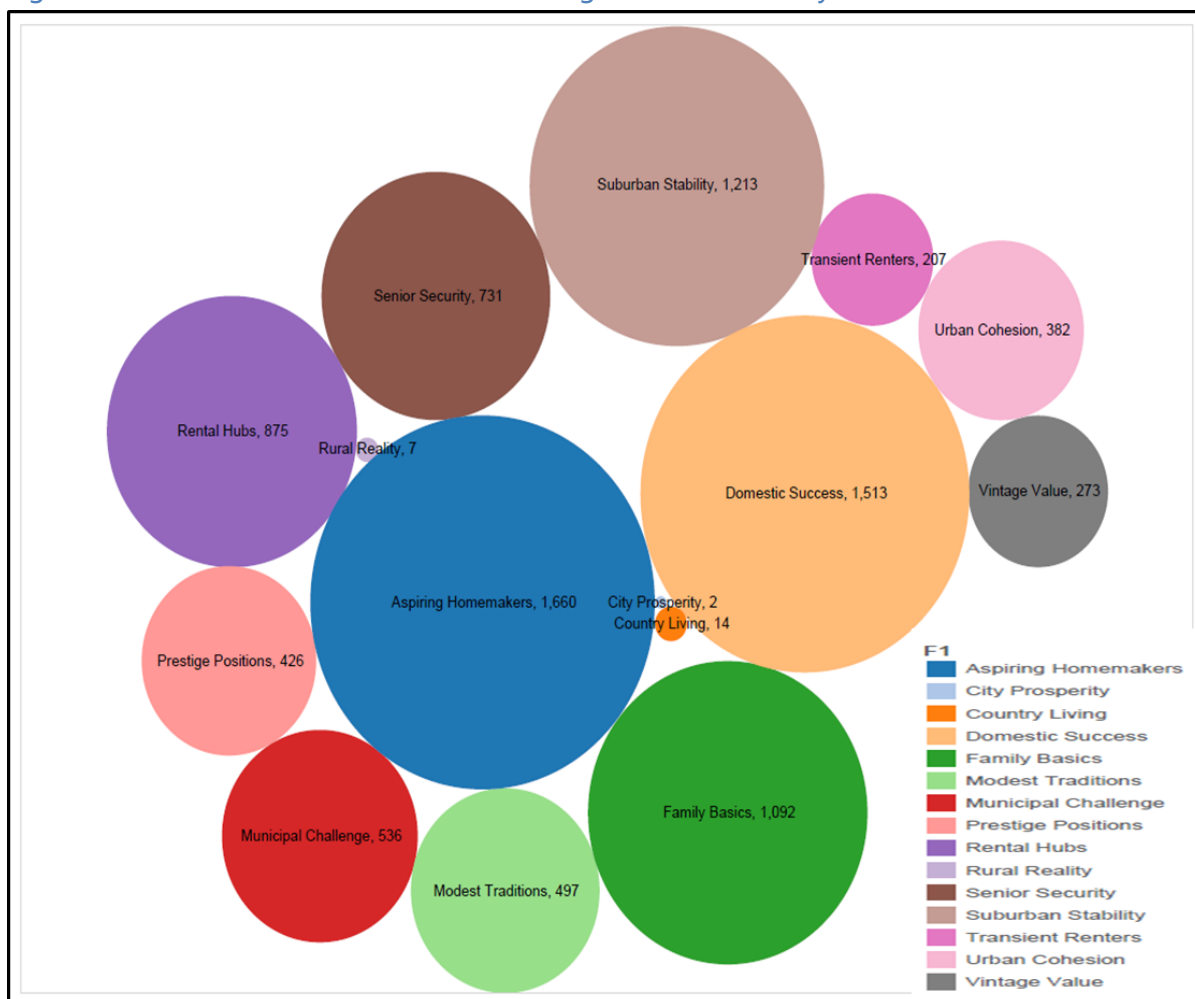
- Community nutrition environment (type, location and accessibility of food outlets);
- Organisational nutrition environment (home, school, work and other settings);
- Consumer nutrition environment (availability, cost and promotion or placement of healthy options);
- Information environment (media and advertising).

PHE's review of the evidence as to how sugar consumption might best be reduced concludes that the scale of the problem is such that every opportunity must be exploited and to this end advocates for a broad, structured programme of parallel measures across all 4 areas. In so doing, PHE puts much of the responsibility for improving the food environment on central government, in particular regarding the latter two areas. This is not to say that action by local partners isn't needed and won't result in additional benefit. A brief analysis of what could and is being done and by whom with regard to each of the 4 aspects of the environment influencing food consumption is provided below.

4.2.1 Community nutrition environment

The cultural shift in what, when and where we eat has seen takeaway food become more frequently eaten and by all sections of the community (See Figure 48).

Figure 48: Number of households in Havering that eat takeaway food once a week

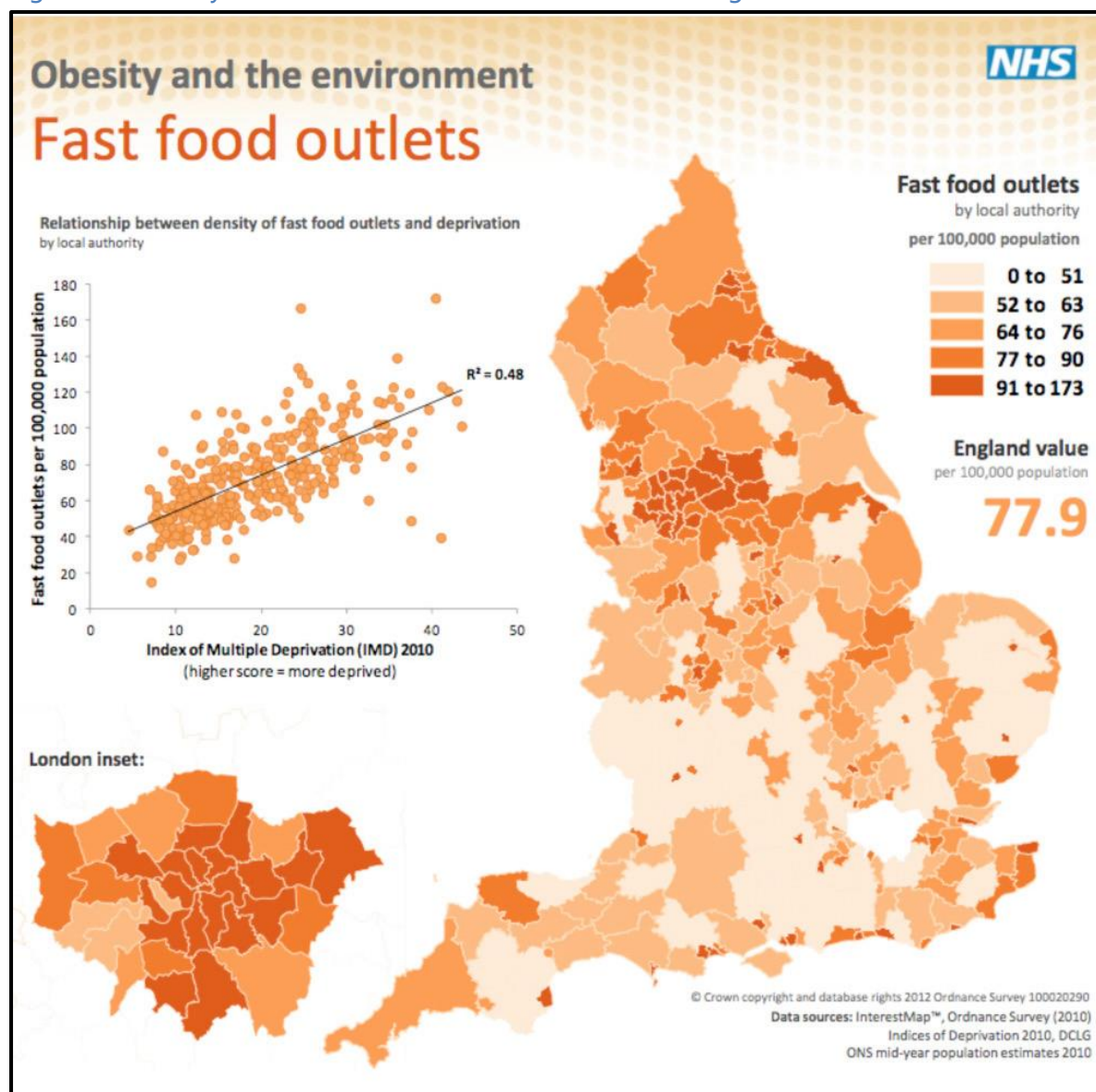


Source: Mosaic

Food businesses are an essential part of a vibrant, healthy and prosperous high street. However, a balance needs to be struck between commerce and health as a preponderance of fast food outlets selling cheap, energy-dense, nutrient-poor foods, served in larger portion sizes, is detrimental to the health of local communities.⁹³

Moreover, as the analysis by PHE reproduced as Figure 49 demonstrates, fast food outlets are concentrated in disadvantaged communities thereby contributing to health inequalities. The same analysis demonstrates that Havering, although not particularly disadvantaged, has a relatively high concentration of fast food restaurants, in common with many other London boroughs.

Figure 49: Density of fast food outlets; local authorities in England, 2010



Reproduced from '[Obesity and the environment: regulating the growth of fast food outlets](#)'. PHE 2014

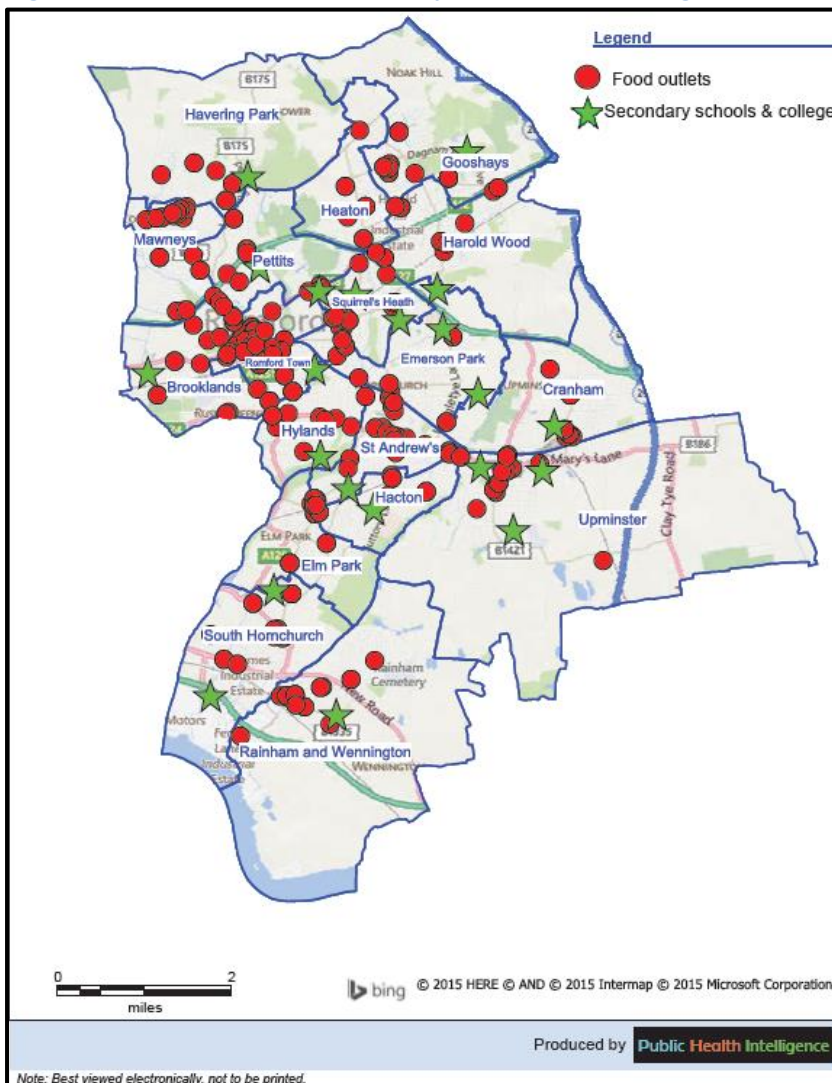
Fast food outlets may be undesirable for a variety of reasons that planners have traditionally considered:

- Hot food takeaways may reduce the visual appeal of the local environment and generate night-time noise
- Short-term car parking outside takeaways may contribute to traffic congestion
- Many hot food takeaways may generate substantial litter in an area well beyond their immediate vicinity
- Discarded food waste and litter attracts foraging animals and pest species
- The National Planning Policy Framework (NPPF) makes it clear that local planning authorities (LPAs) also have a responsibility to promote healthy communities.⁹⁴ Local plans should “take account of and support local strategies to improve health, social and cultural wellbeing for all”. The NPPF also gives clear advice that local planning authorities should “work with public health leads and organisations to understand and take account

of the health status and needs of the local population... including expected changes, and any information about relevant barriers to improving health and wellbeing”.

- Both NICE⁹⁵ and PHE⁹⁶ recommend that planning authorities restrict planning permission for takeaways and other food retail outlets in specific areas for example, within walking distance of schools.
- PHE report that a number of local authorities have drawn up supplementary planning documents (SPDs) to restrict the development of new fast food premises. Some have included proximity to schools and health impact, as well as issues such as over-concentration and clustering, highway safety, cooking smells, and litter. PHE note that SPDs take a long time to prepare and must relate to a pre-existing policy in the local plan.
- Given that Havering already has a relatively high number of fast food outlets, relying solely on the planning process to prevent still more would be an inadequate response given the number of obese teenagers in the borough. Schools themselves should put in place comprehensive plans and policies including consideration of whether pupils should be allowed to leave the premises at lunchtime particularly where the school is located near a concentration of fast food outlets.

Figure 50: Food outlets, secondary schools and colleges in Havering



4.2.2 Organisational nutrition environment (home, school, work and other settings)

Large sections of the population rely on others to buy, prepare and serve food on their behalf for a significant number of their meals. For some people this may be all the food that they eat. These individuals rely on the providers of their food to plan menus in such a way that it is possible for them to meet dietary recommendations. Using food and nutrient-based standards as a framework on which to base menus will help to ensure that people can achieve dietary recommendations. This most obviously applies to children and young people in pre-schools, schools and colleges, patients in health care settings and people in residential care. But a much larger proportion of the population would benefit if the food in workplaces was also guided by these principles.

PHE have stated that the best available evidence suggests that lowering the sugar content of the food and drinks offered in shops, restaurants, takeaways and the many places we eat including at work and in institutions (schools, hospitals, prisons etc.) should be part of the holistic approach needed if sugar consumption is to be reduced.

In addition, PHE recommend that action should be taken to adopt, implement and monitor the government buying standards for food and catering services (GBSF) across the public sector, including national and local government and the NHS to ensure provision and sale of healthier food and drinks in hospitals, leisure centres etc.

4.2.3 Consumer nutrition environment (availability, cost and promotion or placement of healthy options)

The previous coalition government initiated the [public health responsibility deal](#) to encourage the food and drink industry to work with it to improve health as opposed to legislating to enforce change. The responsibility deal included a calorie reduction pledge to provide a mechanism for the food and drink industry to make and record its contribution to helping the population meet the calorie reduction challenge set out in Healthy Lives, healthy people: a call to action on obesity in England.

The pledge states:-

"Recognising that the Call to Action on Obesity in England set out the importance of action on obesity, and issued a challenge to the population to reduce its total calorie consumption by 5 billion calories (kcal) a day.

We will support and enable our customers to eat and drink fewer calories through actions such as product/ menu reformulation, reviewing portion sizes, education and information, and actions to shift the marketing mix towards lower calorie options. We will monitor and report on our actions on an annual basis."

By November 2015, forty three manufacturers²² had signed up to the pledge committing to a range of actions including reformulation; reduction of portion size; development of lower calorie options; encouraging consumers to choose healthier options; satiety enhancers; a

²² <https://responsibilitydeal.dh.gov.uk/pledges/pledge/?pl=23> Accessed November 2015.

balanced portfolio of products and activity intended to inform and educate consumers towards making healthier choices.

From the outset, a number of stakeholders advocated for more direct action by Government arguing that voluntary commitments made by industry would be insufficiently robust to bring about real change.⁹⁷ A subsequent analysis by researchers at the London School of Hygiene & Tropical Medicine of the responsibility deal as it pertains to alcohol suggested that "the majority of its interventions are ineffective, poorly reported or were already happening anyway". Moreover, the introduction of new low alcohol products under the auspices of the responsibility deal, as opposed to the removal of products high in alcohol, served to widen consumer choice and could increase, rather than decrease, the total number of alcohol products in the market.^{98 99}

PHE, in their analysis of how intake of sugar might best be reduced¹⁰⁰ advocate for many of the interventions voluntarily put in place via the responsibility deal. For example, PHE state that a comprehensive programme of reformulation to reduce the levels of sugar in all contributing food and drinks available would significantly lower sugar intakes, particularly if accompanied by reductions in portion size. However, PHE recommends that such approaches should be adopted industry wide thereby undermining the voluntary approach behind the public health responsibility. Moreover, PHE advocates for the use of fiscal measures which are much less likely to be adopted voluntarily.

Thus PHE noted that food retail price promotions are more widespread in Britain than anywhere else in Europe. Foods on promotion account for around 40% of all expenditure on food and drinks consumed at home. Higher sugar products are promoted more than other foods. PHE estimated that price promotions increase the amount of food and drink people buy by around one-fifth. These are purchases people would not make without the in-store promotions. They also serve to increase the amount of sugar purchased by 6% overall. In response, PHE recommend action to reduce and rebalance the number and type of price promotions in all retail outlets including supermarkets and convenience stores and the out of home sector (including restaurants, cafes and takeaways).

PHE also concluded, based on the best available evidence, that price increases, such as by taxation, would influence purchasing of sugar sweetened drinks and other high sugar products at least in the short-term with the effect being larger at higher levels of taxation. To this end, PHE recommended the introduction of a price increase of a minimum of 10-20% on high sugar products through the use of a tax or levy such as on full sugar soft drinks.

The new conservative administration is expected to issue a new obesity strategy in the spring of 2016. It's unclear whether the advice from PHE will shift policy towards more direct intervention. In the meantime, some activists have sought to demonstrate support from the public and industry for more robust action.

To this end, and following the Channel 4 documentary [sugar rush](#) which outlined the harm caused by excessive sugar consumption, Jamie Oliver encouraged other restaurants to follow

his lead in adding a self-imposed levy of 10p to the price of all non-alcoholic soft drinks with added sugar to heighten consumer awareness of hidden sugars.

“

We are all price sensitive and a levy on sugary drinks over the healthier alternatives will create a moment of reflection and help break the automatic choice of a sugary drink and give the opportunity to make a healthier choice.

”

Professor Susan Jebb, Professor of Diet and Population Health, University of Oxford

Source: [Sugar rush](#)

Subsequently, Brighton and Hove Council endorsed and encouraged participation by restaurants in the area.²³ Given that Council and CCG are charged with improving the health of local people and the quality of local care services in times of acute austerity; they should take every opportunity to advocate for effective action by central government.

5.2.4 Information environment (media and advertising).

PHE have noted that children in England are exposed to a high volume of marketing and advertising in many different forms both old (e.g. TV advertising, radio, cinema, press and billboards) and new (e.g. advergames, social media, online advertising), as well as through sponsorship by food and drinks companies of TV programmes, public amenities and events. The available research evidence shows that all forms of marketing consistently influence food preference, choice and purchasing in children and adults.

The budgets associated with these sophisticated, multi-layered, strategic marketing campaigns, directed at changing minor behaviours e.g. between a number of children's cereals all of which are high in free sugars, are significantly higher than public monies available to counteract them and promote more valuable – to society at least - healthy lifestyle choices. For example, Government estimated that in 2007 £838 million was spent by the food industry on advertising and promotion food and drink¹⁰¹. To put this into context the annual budget for Public Health England's flagship marketing campaign Change4Life when it was launched in 2009 was £15 million per year for three years.¹⁰²

To level out the playing field, PHE recommends that Government should set a clear definition for high sugar foods and thereafter take action to significantly reduce opportunities to market and advertise high sugar food and drink products to children and adults across all media including digital platforms and through sponsorship. PHE recommends that campaigns such as Change4life should be continued to raise awareness of concerns around sugar levels in the diet, encourage action to reduce intakes and provide practical steps to help people lower their own and their families' sugar intake.

As with physical activity, PHE recognises the contribution that a range of professionals could make as advocates of behaviour change. To this end, PHE recommended that accredited

²³ <http://www.theguardian.com/uk-news/2015/oct/05/brighton-launches-voluntary-sugar-tax-in-effort-to-tackle-obesity>

training in diet and health should routinely be delivered to all of those who have opportunities to influence food choices e.g. in the catering, fitness and leisure sectors and others within local authorities as well as health professionals.

4.3 Creating a healthy community

A fairly arbitrary distinction has been made between actions designed to act on groups of the population to create a culture that supports healthy choices which are discussed here and action focused on the individual, designed to raise individual awareness and/or support change which is discussed in 4.4 Supporting individuals to change).

4.3.1 Leadership and 'walking the walk'

NICE guidance on working with local communities to tackle obesity recommends developing a sustainable, community-wide approach that incorporates strategic leadership, coordination of local action and communication, and at the same time involves the local community, businesses and social enterprises.¹⁰³

The Health and Wellbeing Board is ideally placed to provide strategic leadership and the adoption of a strategy to tackle obesity is an essential first step. However, thereafter public sector agencies must demonstrate to their staff, clients, patients, Council Tax payers etc. that they take health seriously. If not, they will undermine their own efforts to motivate individuals to change and adopt healthier lifestyles.

Obvious opportunities to 'walk the walk' include:

- the quality of the healthy workplace offer and associated HR policy (see 4.3.2 Healthy working places);
- active participation in and support for national health improvement campaigns (see 4.4.1 Health improvement campaigns)
- the extent to which the premises from which services are provided are consistent with healthy living messages (see 4.3.3 Public sector premises).
- consideration of the health impact of corporate decisions (see 4.3.4 Health impact in decision making)
- the extent to which health professionals and the wider public sector workforce (see 4.3.5 The wider workforce) actively promote healthy living to local residents in the course of their usual duties.

Public sector agencies represent only a small part of the resources available to promote change. The community and voluntary sector already does a great deal that serves to promote healthy choices – particularly regarding physical activity (for more information, see). The partnership must consider how it can support the voluntary sector despite the prevailing austerity. Likewise, the partnership needs to think how it can engage the local business sector (see 4.3.7 Business sector).

4.3.2 Healthy working places

Every employer has an obvious vested interest in doing everything practicable to ensure the good health of its workforce so sickness absence is minimised, service delivery is improved and spend on sick pay minimised. Obese employees have more and longer sickness absences than workers of a healthy weight and may suffer other issues in the workplace including prejudice and discrimination which may leave the employer open to legal challenge. Moreover, effective healthy workplace schemes in the statutory sector would benefit a significant minority of households in Havering given that a high proportion of Council and NHS employees are local residents.

The [London Healthy Workplace Charter](#) is a self-assessment framework that recognises employers for investing in workplace health and wellbeing. It provides a series of standards for workplaces to meet in order to guide them to creating a health-enhancing workplace. Employers are encouraged to work towards three levels against each standard: commitment, achievement and excellence. London Borough of Havering reached the 'Achievement' standard in 2014 and is working towards excellence. The Council's healthy workplace scheme includes regular taster sessions where employees can be introduced to the support available. The Council participates in the **cycle to work** scheme which minimises the financial barrier that might otherwise limit cycling to work. Likewise **walk to work** week serves to demonstrate the employer's support for a wider active transport agenda and enables work colleagues to support and motivate one another to make healthier choices.

NHS England's current forward plan - [FIVE YEAR FORWARD VIEW](#) notes that three quarters of NHS trusts say they offer staff help to quit smoking, only about a third offer them support in keeping to a healthy weight. Three quarters of hospitals do not offer healthy food to staff working night shifts. As part of its overall approach to 'getting serious on prevention' the NHS will:

- Cut access to unhealthy products on NHS premises, implementing food standards, and providing healthy options for night staff
- Measure staff health and wellbeing, and introduce voluntary work-based weight watching and health schemes.
- Support "active travel" schemes for staff and visitors.
- Promote the Workplace Wellbeing Charter, the Global Corporate Challenge and the TUC's Better Health and Work initiative, and ensure NICE guidance on promoting healthy workplaces is implemented, particularly for mental health.
- Review with the Faculty of Occupational Medicine the strengthening of occupational health.

Given this shared and growing agenda, statutory sector organisations should seek to coordinate and pool their collective efforts to improve quality and lower costs.

4.3.3 Public sector premises

The best available evidence indicates that many health-related decisions are made very quickly, with little conscious thought. Thus, although many individuals express a rational

intention to eat healthfully, in practice they more commonly select unhealthy foods for immediate reasons such as taste and convenience.

Nudge theory suggests that the available options can often be presented in such a way as to favour a desired outcome whilst preserving the individual's ability to choose. Nudges may vary from simple promotion of healthy options e.g. sign posting the stairs as opposed to the lift or putting fruit by the checkout as opposed to confectionary to more direct incentives e.g. making healthy food options noticeably cheaper than less healthy ones. A periodic **audit of the environment** in which statutory sector services are provided to identify opportunities to nudge in favour of healthier options may add value and ensure health improvement messages are not unintentionally undermined. Such a process would avoid the pitfalls identified in the NHS Five year forward view whereby the food available to NHS staff and patients alike was often unhealthy. Building such an assessment into existing checks in the workplace e.g. health and safety, would minimise the additional effort involved. A common approach across all public sector bodies in the borough would avoid duplication of effort and ensure consistent messaging to residents.

4.3.4 Health impact in decision making

As discussed in the previous section, a complex array of factors impact on obesity levels. As a result, it is difficult to identify which decisions, and by whom, will or won't impact on obesity levels, still less on health in the round.

Equality impact assessment (EIA) is widely used to ensure public sector organisations meet their legal responsibility to promote equality and minimise the risk that they unintentionally disadvantage people with a protected characteristic. EIA could be used as a template for health impact assessment (HIA) - a process whereby significant decisions by public sector agencies could be reviewed to identify potential health impacts.

Whereas EIA is a legal duty, HIA is not. Hence, care would be needed to ensure that the process is proportionate and demonstrably adds value i.e. that it assists decision makers to identify significant health impacts and modify them as needed to maximise any potential benefits and mitigate any harms.

The Dept. of Health has previously provided guidance on health impact assessment that could be the basis for a local approach¹⁰⁴.

4.3.5 The wider workforce

The Making Every Contact Count (MECC) concept draws on the established role of health professionals, particularly in primary care, who provide opportunistic brief advice to patients about lifestyle related issues. There is good evidence that such advice has a small but measurable impact on the behaviour of patients e.g. provision of brief advice about smoking by a doctor produces 1 additional quitter for somewhere between every 33 to 80 patients offered advice.¹⁰⁵

Making Every Contact Count (MECC) seeks to engage professionals across the NHS, but also to establish a much wider network involving public facing staff across the public sector as a whole and volunteers elsewhere.

The Council has developed a 'health champion' scheme called '[my health matters](#)' which fits with the MECC concept. Tapestry, a local VCS provider has been commissioned, following a competitive tendering exercise, to recruit and thereafter manage a network of community health champions. Champions undertake [relevant training](#) accredited by the Royal Society of Public Health (RSPH) which gives them a better understanding of their health; an understanding of how and when to offer brief advice and information to help them signpost customers, colleagues, friends and family to additional sources of support. The scheme is on target to recruit and train 200 health champions in the course of 2015/16. As well as offering brief advice in their normal role, some health champions are available to attend events across the borough in support of particular health improvement campaigns.

Public Health England (PHE) and Health Education England (HEE) are [working together](#) to address a perceived lack of clarity about what is meant by MECC and to better coordinate efforts and resources. The core definition of MECC that they are working with is primarily focused on people working in the public sector and voluntary sector that are trained to:

- Deliver 'very brief' or 'brief' evidence based advice interventions for lifestyle behavioural change; the core elements of which are stopping smoking, increasing physical activity, reducing alcohol consumption maintaining a healthy weight & diet and promoting mental health and wellbeing.
- Be competent and confident to deliver this intervention; and
- Be knowledgeable about local services and how to signpost people to enable them to access them.

As such, the local health champions scheme '*my health matters*' is consistent with the national vision of MECC. Nonetheless, the local scheme should be reviewed to ensure that the taken locally approach to training, the materials used etc. is compliant with relevant guidance as and when this is agreed and published by PHE/HHE.

Brief advice is an established part of health professional practice, particularly in primary care. However, NHS England, in its Five Year Forward plan, proposes a massive increase when it states that the NHS will take steps to support its whole 1.3 million workforce to act as 'health ambassadors'. The whole statutory sector workforce in England and Wales, including education, is likely to exceed 4 million despite ongoing downsizing. If only 1 in 20 could be engaged as a health champion, the potential staff resource would be massive; particularly if appropriately trained and managed to support particular priorities and aligned with effective marketing.

4.3.6 Voluntary and community sector

Community groups can drive health improvement in many ways. A huge range of sports and active leisure options are provided by third sector organisations. There are hundreds of volunteers across the borough who support the many sports and activity clubs in Havering.

The [Havering Sports Council](#) is the collective voice of these clubs. The objectives of the Sports Council are:

- To assess the sporting needs of the London Borough of Havering.
- To examine the need for improving existing facilities and the provision of new facilities.
- To assist with information of available sporting facilities throughout the borough.
- To assist Havering Council or any other authority requiring assistance by advising on the collective opinions of local sports interests for the future planning for sports facilities.
- To encourage schools, school leavers and youth to participate in sport.
- To consider and take action as deemed necessary on reports and recommendations from other organisations concerning the interest of sport.
- To assist where necessary in organising events to further sporting interests in the borough.

In addition, Havering Sports Council organises and promotes the annual Havering Sports Awards, assists clubs to access necessary training e.g. first aid, health and safety and child protection and publishes a handbook listing and promoting affiliated clubs, which is also available [on-line](#). Conservation groups offer opportunities to be physically active and the motivation for like-minded individuals. For example, the Bedford's Park Walled Garden regeneration programme ran a 'Grow, Cook, Eat' summer holiday programme for children in 2014.

4.3.7 Business sector

Thus far, the business sector has largely been described in terms of being a part of the problem e.g. responsible for the marketing of high energy foods to children.

Central Government has had modest success recruiting food manufacturers to commit to the responsibility deal (see 4.2.3 Consumer nutrition environment (availability, cost and promotion or placement of healthy options) but not enough to halt calls for legislation.

The private sector is a significant player in the leisure and fitness market.

Jamie Oliver's in-restaurant sugar levy is an example of an industry led initiative and one to which local food businesses could usefully commit (see 4.2.1 Community nutrition environment).

Locally, the Environmental Health Team has previously assisted local food businesses to participate in the [Healthier Catering Commitment](#), which advises restaurants and fast food outlets about how to prepare food more healthily. However, currently the team can do little more than share leaflets due to lack of capacity.

This no doubt is a very incomplete picture of the business sector's contribution health improvement. Nonetheless, more thought is needed about how the private sector could be involved.

4.4 Supporting individuals to change

The environmental changes discussed elsewhere, particularly to the composition and cost of 'unhealthy' foods would impact on levels of obesity irrespective of an individual's level of awareness and commitment to change. However, conscious action on the part of the individual will always increase the likelihood and scale of change resulting. Action to change the prevailing culture and collective attitude to healthy living would help (as discussed in). Here, we discuss how campaigns might raise awareness and motivate the individual to change (see 4.4.1 Health improvement campaigns), mention the NHS Health Checks Programme (4.4.2 NHS health checks) and discuss the additional value of direct support in the form of weight management services and/or clinical treatment (see 4.4.3 Weight management services and clinical treatment).

4.4.1 Health improvement campaigns

Despite there being a general understanding that obesity is harmful, and being active and eating well positively improve health; a relatively low proportion of the population are sufficiently motivated to address the issue.

Effective campaigns have a role to play in changing attitudes with the ultimate aim of changing social norms such that the healthy choice becomes the usual choice for the majority. PHE highlight national examples of effective campaigning including:

- PHE's own Change4Life '[10 Minute Shake Up](#)' campaign with Disney, which they estimate resulted in an extra 104 million minutes of physical activity undertaken by children over the summer holidays.
- NHS Choices' '[Couch to 5K](#)' campaign which saw an app and podcast downloaded 209,000 times in the first month after launch
- the range of voluntary sector mass participation challenges such as [Race for Life](#).

Public Health England launched its [sugar smart](#) campaign in January 2016 again featuring an app – in this case advising consumers of the sugar content of foods, quantified in terms of cubes of sugar.

Local agencies have neither the resources or expertise to develop similar campaigns but we can seek to amplify the message and use it to promote relevant local resources e.g. The Council's Sport Development Team badged programmes of activity for women and girls under the '[this girl can](#)' banner to tie in the [Sport England campaign](#).

NHS Health improvement campaigns can also be linked to the achievement of other Council priorities e.g. increases in the use of public transport; volunteering; use and conservation of the borough's green space etc. and vice versa - the Council's [Love](#)



[Food Hate Waste](#) campaign sought to reduce the amount of waste going to landfill in part by raising awareness of how 'leftovers' can be used to create healthy meals.

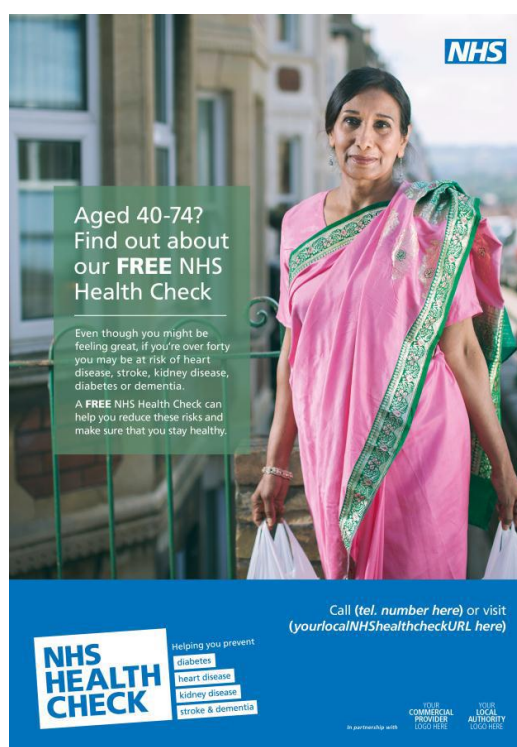
Active public campaigning also makes it easier for health champions and health professionals to raise obesity which remains a highly sensitive issue. It can be used to signpost individuals to relevant local assets and reliable evidence based sources of advice and support e.g. self-health apps. Campaigning would also serve to remind Council Officers and indeed members of the importance of obesity and make it more likely they would consider the health impact of obesity in their decision making.

As with other workstreams focused on the public sector, coordination between different agencies would serve to maximise impact and avoid duplication of effort.

4.4.2 NHS health checks

The [NHS health checks programme](#) is an extension of the MECC principle (see 4.3.5 The wider workforce) whereby everyone between the ages of 40 and 74, who has not already been diagnosed with a cardio-vascular condition, is invited once every five years to have a check which assesses their risk of developing heart disease, stroke, kidney disease and diabetes. They are then offered advice, support and possibly treatment appropriate to the level of risk found.

The effectiveness and cost effectiveness of health checks is the subject of on-going debate.¹⁰⁶ However, NHS health checks are one of the Council's mandated public health responsibilities which it legally must ensure are available to local residents. To this end, LB Havering commissions GPs to provide health checks for their patient list.



A common criticism of the health checks programme is that the majority of recipients are at low risk hence the average benefit per check is likely to be relatively low for something that occupies a health professional for 20 minutes. Targeting higher risk groups would reduce the total benefit possible, but increase the cost effectiveness of the programme.

4.4.3 Weight management services and clinical treatment

This assessment has consciously sought to emphasise interventions that impact on the whole population – because obesity, sedentary behaviour and poor diet affect the great majority of the population. Nonetheless, here we consider the potential benefits to individual residents or patients of specialist health improvement and treatment services.

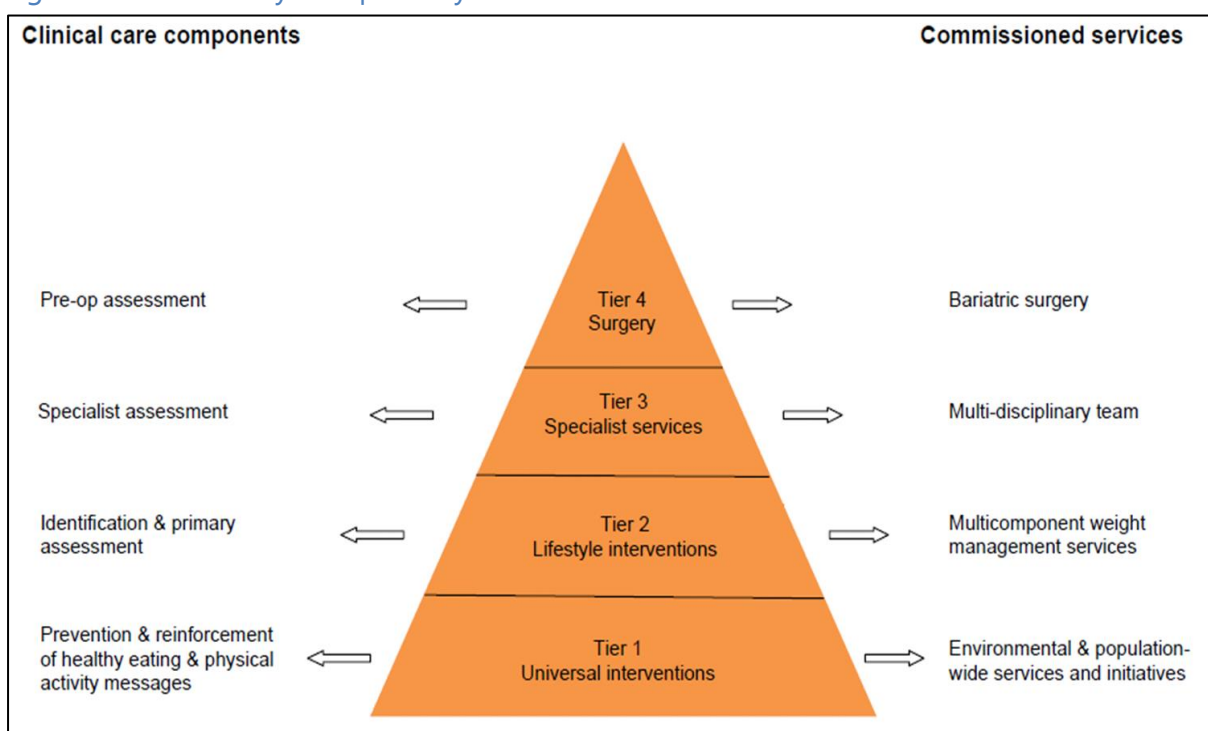
The obesity care pathway

Lifestyle weight management programmes and health care interventions form part of the overall care pathway for obese patients.

A working group convened by NHS England and Public Health England concluded¹⁰⁷ that:

- Local Authorities had primary commissioning responsibility for tiers 1 and 2, including population level interventions to encourage healthy eating and physical activity, as well as lifestyle related weight management services
- Clinical Commissioning Groups (CCGs) commission for tier 3, clinician-led specialist multidisciplinary teams
- NHS England should retain primary commissioning responsibility for tier 4 services, including bariatric surgery²⁴.

Figure 51: The obesity care pathway



Source: Best practice guidance for tier 2 services. Department of Health, 2013.

Although the group made a clear recommendation regarding commissioning responsibilities, they also acknowledged that actual provision was for local decision e.g. by Health and Wellbeing Boards, reflecting local priorities and resource constraints.

An assessment of tier 2 and tier 3 services by PHE published in 2015 showed significant variation in local provision¹⁰⁸. In relation to tier 2 children services, respondents from 56% of local authorities reported having a service; 61% of local authorities reported a tier 2 service

²⁴ The Dept. of Health consulted on a proposal from NHSE to transfer responsibility to CCGs in Nov 2014. Subsequently, a decision was made to defer any transfer until April 2016 at the earliest.

for adults. The response regarding Tier 3 services was much lower suggesting lower provision.

Whatever the local provision, it's recommended that it should be captured in an agreed pathway that sets out local services and any criteria regarding access.

Lifestyle (tier 2) weight management programmes

NICE defines lifestyle weight management programmes for overweight or obese adults as multi-component programmes that aim to reduce a person's energy intake and help them to be more physically active by changing their behaviour. NICE recommends referral for adults who are obese, that is with a BMI over 30 kg/m², or lower for those from black and minority ethnic groups or with other risk factors e.g. comorbidities such as type-2 diabetes.¹⁰⁹

Tier 2 community-based weight management programmes are within the commissioning responsibilities of local government but commercially available programmes such as Weightwatchers are 'effective' (discussed further below) and can be accessed by consumers at their own expense.

Commissioners are encouraged to use the Department of Health's best practice guidance for weight management services.¹¹⁰ Assuming compliance with this advice, commissioners and participants can reasonably expect at least 60% completion, resulting in an average weight loss of 3% or more, with at least 30% of participants losing 5% or more of their initial weight. To put this in context, weight losses of between 5 and 10% in overweight and obese individuals with type 2 diabetes have been associated with significant improvements in CVD risk factors at 1 year; but those with larger weight losses had greater benefits.¹¹¹

Commissioners are also encouraged to consider commissioning additional services to reduce the likelihood that weight will be regained which is the most important single factor in determining whether an intervention is cost effective. The cost effectiveness of weight management services can be demonstrated by modelling even if only very modest weight loss (e.g. 1 kg) is achieved but maintained for life. However if it is regained e.g. within 2 or 3 years, modelling indicates that interventions would have to be very cheap e.g. less than £100 per person and the average weight loss would need to be in excess of 5 kg for services to remain cost effective.¹¹² However, there is a lack of long-term trials and at best the available evidence suggests that weight management services are probably cost effective.

Modelling also demonstrates that the cost effectiveness of services is likely to be higher where clients at higher risk of ill health e.g. heavier and older clients. Similarly, the presence of a pre-existing long term condition, notably diabetes, is likely to result in greater benefit for a given investment. In this regard it's worth noting that NHS England has stated that over the next five years, England will become the first country to implement at scale, a national evidence-based diabetes prevention programme modelled on proven UK and international models, and linked where appropriate to the NHS Health Checks programme. London Borough of Havering previously commissioned weight watcher vouchers that were distributed via local GPs to obese patients. However, this was stopped in 2015/16 due to

lack of funding and limited evidence about the outcomes achieved. As a result, no commissioned tier 2 services are available in Havering but residents can access support at their own expense.

NICE also recommends provision of weight management services for overweight and obese children (BMI above 91st centile). As with adult services, the form and content of services thought to be most effective is described in the Dept. of Health '*Best practice guidance for tier 2 service*'. The aim of weight management programmes for children and young people may be weight maintenance or weight loss, depending on the person's age and stage of growth.

The MEND programme, a dedicated weight management service for children resident in the borough was commissioned until 2013/14. Despite being an evidence based intervention, the Havering scheme struggled to recruit participants, possibly due to stigma associated with attending 'fat' club but also the fact that parents were required to commit considerable time themselves. Consequently, small numbers of children were benefiting at considerable cost and the decision was taken to decommission and reinvest the monies in a pilot of schools based Change4Life challenge clubs.

Tier 3 weight management services

A tier 3 obesity service is for obese individuals (usually with a body mass index ≥ 35 with co-morbidities or 40+ with or without co-morbidities) who have not responded to previous tier interventions. A tier 3 service is a multi-disciplinary team of specialists, led by a clinician and typically including: a physician (consultant or GP with a special interest); specialist nurse; specialist dietician; psychologist or psychiatrist; and physiotherapist/physical activity specialist.

In line with relevant NICE guidance¹¹³, NHS England's clinical commissioning policy regarding obesity surgery¹¹⁴ recommends intensive and multidisciplinary assessment and support for individuals such that all non-invasive treatment options have been trialled and exhausted prior to then being offered potentially higher risk surgical approaches. Where progress to tier 4 bariatric surgery is required, the policy states that patients should undergo a service based weight loss programme (non-surgical tier 3/4), for a minimum duration of 6 months but usually 12 – 24.

As in many other areas of the country, there is no tier 3 service in Havering. The CCG developed plans for a pilot scheme which have still to be implemented. In the meantime, the specialist tier-4 service (the Homerton Hospital) has extended its role to bridge the gap to surgery. However, a local service would be more convenient for patients and lessen the impression that surgery is the inevitable end point. Any service should be consistent with relevant commissioning guidance¹¹⁵.

Tier 4 services – bariatric surgery

Bariatric surgery (gastric banding, gastric bypass, sleeve gastrectomy and duodenal switch gastric bypass) is a highly specialised intervention offered to carefully selected patients with severe and complex obesity that have not responded to all other non-invasive therapies.

NICE recommend that patients meeting the following criteria are considered for bariatric surgery:

- have a **BMI** of 40 or more, or have a BMI between 35-40 plus a health problem e.g. hypertension, type-2 diabetes, severe mobility problems, or sleep apnoea.
- have previously seen and been treated by a specialised obesity team.
- already have tried all other ways of losing weight with no success.
- have no health problems that preclude surgery
- commit to the long-term medical follow-up that is needed after weight loss surgery.
- have treatment and follow-up by a team of experts specialised in weight loss surgery.

NICE recommends that for patients with a BMI of 50 or more, weight loss surgery may be considered as a first option i.e. the requirement to have tried all other ways of losing weight with no success should be waived. Patients need to be motivated and adequately prepared. Given that this is the case, and with appropriately selected patients, bariatric surgery has been shown to be highly cost effective in reducing BMI and improving health outcomes; as although bariatric surgery is significantly more costly than conservative management in the short term, ultimately it is clinically more effective and less expensive than standard therapy¹¹⁶.

In 2006, NICE estimated the potential cohort of patients who may be eligible for, and who wish to take up, bariatric surgery as approximately 0.53% of the adult population in England or 257,000 people. The number will have increased in the meantime. However, the number of people getting surgery remains very small – 26 Havering residents in 2014/15.

Table 8: Finished Consultant Episodes with a primary diagnosis of obesity and a main or secondary procedure of 'Bariatric Surgery' in England, by Region, Local Authority and gender, 2014/15

	Number of Admissions			Admissions per 100,000 of population		
	All persons	Male	Female	All persons	Male	Female
England	6,032	1,444	4,588	11	5	17
London	1,377	322	1,055	16	8	25
Havering	26	7	19	11	6	15

Source: Health and Social Care Information Centre (HSCIC), 2015

4.5 Giving children the best possible start

There are numerous reasons why children and young people should be our priority over and above the obvious moral obligation to protect the vulnerable:

- Losing weight in later life is difficult – hence prevention in early years is essential
- Experiences in early life, indeed before birth, predispose individuals to weight gain in later life both physiologically and behaviourally
- Behaviours and skills acquired in early years shape lifestyle choices in later life.

As with obesity in general, there is no single silver bullet to the problem of childhood obesity. There are numerous opportunities to intervene, many of which could potentially benefit parents and the community in general. These start at or indeed before conception and proceed through pregnancy (4.5.1 Preconception and pregnancy); the promotion of breast feeding (4.5.2 Breastfeeding) and healthy weaning (4.5.3 Weaning) are crucially important.

Health visitors, working with children's centre staff, have a key role in early identification, supporting health promotion and change management around healthy lifestyles, using evidence-based techniques such as promotional and motivational interviewing, during routine and opportunistic contacts. Children with obese parents should be a particular priority as they are at much greater risk of obesity than peers. Assisting parents with the knowledge and skills necessary to cook healthily may help some (4.5.4 Parental cooking skills).

Many young children are cared for by nurseries or childminders who assume direct control of the child's diet and activity for significant periods as would a parent (see 4.5.5 Early years child care providers). There is enormous potential for schools to provide children with a healthy environment and assist them to make healthier choices (See 4.5.6 Schools). The National Child Measurement Programme is itself an opportunity to intervene – see National Child Measurement Programme (NCMP).

4.5.1 Preconception and pregnancy

As discussed previously, maternal obesity during pregnancy increases the likelihood that the resulting babies will become obese children and subsequently obese adults. The Chief Medical Officer has emphasised that the majority of pregnancies are planned, and hence there is often an opportunity to counsel obese women before conception e.g. in infertility clinics, when women have long acting reversible contraception removed or indeed at baby checks for existing children when about one in five mothers are likely to be planning another pregnancy. Such women should be offered information about the risks of maternal obesity as well as vitamins and folate supplements as appropriate.¹¹⁷

Once pregnant, many women are motivated to adopt healthy behaviours, but the first contact with antenatal care may come relatively late into pregnancy, with little consideration of the opportunities to improve outcomes for mother and baby by eating well and taking exercise to minimise excessive weight gain.

Therefore, it is recommended that GPs, Practice Nurses, Midwives and other relevant clinicians are given the skills and information required to appropriately advise women who are attempting to conceive, are pregnant, or who are post-partum.

4.5.2 Breastfeeding

There is good evidence that breastfeeding reduces the risk of childhood obesity. Likewise, the evidence base regarding effective ways to promote and support breastfeeding is well established¹¹⁸. Current evidence suggests that local service provision should deliver an appropriate mix of education and support programmes, routinely delivered ante- and post-natally by both health professionals and peer supporters in accordance with local population needs. UNICEF's Baby Friendly Initiative (BFI) is the gold standard approach to breastfeeding.

Havering has an active Infant Feeding Strategy group, with representation from LBH, NELFT and the voluntary sector that meets on a regular basis. NELFT has been working towards full accreditation under the BFI scheme for some time. Midwifery services at BHRUHT have recently appointed a BFI coordinator to support implementation across the Trust. The same approach should be adopted by the Council's Children's Centres and other settings used by mothers and babies.

Havering's Health Visiting Service is provided by NELFT and has a healthy eating policy covering breastfeeding and weaning. Infants are regularly weighed and relevant advice given. Currently Infant Feeding Support Cafés are run in two of the borough's six Children's Centres and parents have the opportunity to drop in for advice on breastfeeding, weaning and oral health.

4.5.3 Weaning

Delaying weaning until babies are at least six months old reduces the likelihood of obesity. The Department of Health and UNICEF recommend the best baby food is homemade from simple ingredients with no added sugar or salt, and incorporates different textures.

Young children are increasingly exposed to highly processed, energy-dense foods that are high in sugar, salt and saturated and trans-fats. This is important to note, as taste preferences and appetite regulation are set in infancy. Health Visitors advocate joint training across NHS, Early Years and possibly PVI settings so that all have common understanding and give consistent healthy eating messages to parents.

Observational studies suggest that the rise in obesity among very young children in the UK is largely restricted to the minority with obese parents. Toddlers as a whole have not changed. By contrast, obesity among adolescents has increased across the entire age group. The data provide further evidence that parenting and/or foetal programming have a fundamental influence on weight gain in the early years, whereas more general (peer-group) influences take over later on. As such additional weaning groups and infant feeding support should be targeted at parents who are themselves obese or whose older children are already overweight or obese.

4.5.4 Parental cooking skills

The change in our food culture as a result of greater time constraints, changes in family and work priorities, food advertising, increased availability of pre-prepared foods and decreased opportunities for cooking skill acquisition within the home and at school has led to increased consumption of fast food, pre-prepared, convenience food products and a decline in cooking from scratch.

Evidence suggests that 96% of mothers use pre-prepared foods (e.g. pizza, chicken nuggets) and only 16% cook from scratch every day. As well as being associated with obesity, this shift in consumer behaviour has contributed to a national decline in cooking ability, with 1 in 6 people lacking the skills, confidence and ability to cook and prepare meals from scratch affecting their ability to feed themselves healthily and affordably. The British Medical Association's report Food for Thought is clear that action must be taken to prevent the next generation growing up with the normality of regularly consuming processed and fast-food, unaware of where their food comes from.

Provision for families to develop cooking skills is currently limited to courses at Havering Adult College and potentially a number of local community-led courses but information about these are not centrally held. Children's Centres previously ran family cooking sessions but funding is not currently available to continue these.

4.5.5 Early years child care providers

Many children are cared for by third parties and an increasing proportion of this care is state funded. All three and four-year-olds and some 2 year olds are entitled to a free part-time early education place. In Havering, the great majority of these places are provided by Private, Voluntary or Independent (PVI) sector organisations. Almost by definition such providers are likely to have fewer resources than schools with which to meet the health needs of children under their care. So supporting and encouraging them regarding active play and healthy eating should be a priority for the Council.

The Council will take responsibility for the commissioning of the health visiting services from October 1st 2015 and should use this opportunity to build links between health visitors and PVI settings. The GLA has been consulting with London Boroughs about a Healthy Early Years Scheme and if this is launched, the Council should actively support local PVI settings to participate.

4.5.6 Schools

A. Building knowledge, skills and behaviours

Schools help children learn about their health, and develop their motivation and self-respect to make healthy choices. More directly, they provide the environment in which children make daily choices about food and physical activity.

The Government-commissioned School Food Plan (SFP) identified the need for action regarding school meal provision (see B. School Meals), practical cooking education and whole-school engagement in food.

In September 2014, cooking and nutrition was introduced into the Design and Technology National Curriculum for Key Stages 1 to 3. The re-introduction of practical cooking to the National Curriculum after a period of absence has been supported locally by Cooking in the Curriculum training for primary school teachers (for whom there is no mandatory training in this area). It is intended that the training delivered in March 2014 will be repeated during the 2015/16 school year. In addition, through the lottery funded 'Food Growing Schools: London' programme, the Council's Public Health Service organised a series of workshops for school staff on food-growing to increase engagement of children with where food comes from.

The national curriculum for physical education aims to ensure that all pupils:

- develop competence to excel in a broad range of physical activities
- are physically active for sustained periods of time
- engage in competitive sports and activities
- lead healthy, active lives

Many initiatives relating to physical education in schools are facilitated by the Havering Sports Collective. Currently 46 primary schools and 18 secondary schools participate in the [Havering Sports Collective](#) which is led by Emerson Park Academy and the Coopers Company and Coburn School. The aims of the collective are as follows:

- To promote, support and provide PE opportunities.
- Organise and fund sports events and competitions
- Increase participation in school sports
- Continue to build the ethos of 'every child matters'
- Support the national school games strategy.

To this end, the Collective organises competitions and provides training for teachers and other staff. The Sports Collective has also worked with schools to provide [Change4Life Sports Clubs](#) - a new type of extracurricular sports club, designed to increase physical activity levels in less active children in [primary](#) and [secondary schools](#) by:

- Using multi-sport themes (primary) or alternative school sports (secondary).
- Using the inspiration of the Olympic and Paralympic Games.
- Responding to what children want.
- Establishing a habit of regular participation.
- Developing a real sense of belonging.
- Changing behaviours relating to key health outcomes (including healthy eating, physical activity and emotional health).

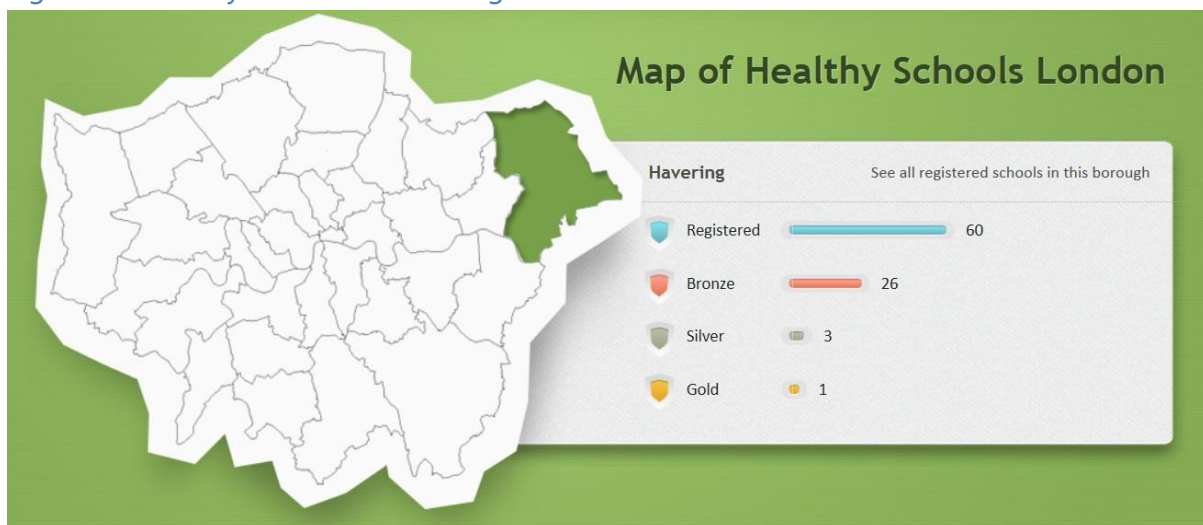
Such clubs can give less active children the skills and confidence to take part in School Games opportunities at Level 1 (intra-school) and Level 2 (inter-school). In addition to having a significant positive effect on the physical activity levels of the young people involved and

their attitudes towards being active and healthy, there is [evidence](#) that they contribute to general wellbeing and other aspects of school and personal life.

Working with the Council and schools, the Sports Collective has also piloted an 'add-on' programme for families called C4L Challenge Clubs designed to promote greater levels of physical activity and healthy eating. The Havering Sports Collective is organised and funded by schools themselves. This is likely to be the model going forward as schools are now largely independent of local authority control and directly receive the bulk of central government funding. In future, the Council should offer support and advice to schools e.g. by piloting new interventions, with the intention of handing responsibility for the maintenance of successful projects on to schools and or developing services as a 'traded offer' paid for by schools.

It is widely acknowledged that schools should take a whole-school approach to promoting healthy eating. In Havering, this is facilitated by the Healthy Schools London awards programme which requires schools to document their commitment to healthy food and its promotion within and beyond the curriculum and encourages the development of healthy eating projects. The Healthy Schools Award scheme has proved enormously popular, with $\frac{3}{4}$ of schools in the borough registering since its re-launch in April 2014.

Figure 52: Healthy Schools in Havering



In December 2015, Scargill Infant School became the first school in Havering to achieve the Healthy Schools London Gold Award. To achieve the award, staff and pupils developed and carried out two action plans. The first focused on healthy eating and resulted in increases in the number of children eating school meals and eating all their vegetables.

From September 2015, Ofsted will begin making judgements about schools' contribution to the Personal Development, Behaviour and Welfare of pupils. Participation in the Healthy Schools Award is expected to assist schools to evidence their contribution in this regard. To date, the Council's Public Health and Learning and Achievement Services have directly supported schools to participate in the Healthy Schools Award. Given further reductions in

the Public Health Allocation and the increasing provision of monies direct to schools, continuation and further expansion of this support will be dependent on funding from schools themselves. A number of other school support services are now provided by the Council as 'traded services' and the intention is to develop the Health Schools support in this way; offering subscribing schools assistance with participation in the award scheme; as well as more specific support e.g. the development of whole school food policies, advice about improving the provision of school food and the delivery of effective practical healthy eating education.

B. School Meals

Given the prevalence of childhood obesity and the scarcity of cooking skills in the population as a whole, the provision of one healthy meal a day is important for all children but particularly those living in disadvantage.

New Government school food standards were introduced in January 2015 to guide caterers in ensuring high nutritional value of school meals. These are mandatory in all maintained schools, academies set up prior to 2010 and new academies formed from June 2014. Academies not falling into these categories are asked to make a voluntary commitment to comply. The standards aim to continue the provision of healthy school meals, where healthy is defined in terms of food and nutrient based standards, but make it easier for school caterers to serve interesting, creative menus in a less burdensome and operationally cheaper way. Havering Catering Services has implemented these standards across all primary schools and is working with the secondary schools it supplies to do so. No information is currently available as to whether other caterers contracted to supply some secondary schools in the borough are compliant with these standards.

The Free School Meal programme provides an opportunity to close the gap in inequality between advantages and less advantaged children, and parents should continue to be encouraged to take up this offer. In September 2014, the Government extended entitlement by introducing Universal Infant Free School Meals (UIFSM) across England. Havering Catering Services caters for all the borough's infant-age children and worked in partnership with schools to ensure this provision was in place. Based on data for the first two terms of the 2014/15 school year, average uptake across all schools was 78%, and ranged from 29% to 100%.

Whilst menus enable purchase of a balanced meal, what the child chooses and actually eats will still vary and for children who choose to bring a packed lunch there is no requirement to follow standards. Hence there is value in schools implementing their own healthy eating policies and working to build knowledge and skills around healthy eating. Given the threat to health posed by childhood obesity, schools should also consider whether more direct intervention is warranted to protect young people e.g. implementation of a 'stay-on-site' policy to minimise consumption of fast food during the school day.

Regardless of lunchtime restrictions or planning boundaries, journeys to and from school still present opportunities for children to purchase hot fast food and convenience snacks. Recent

opportunities via the Healthy Schools London programme and Junior Citizen Event have enabled education of children about the level of fat and salt contained in typical fast food meals compared to school meals, and it is hoped this will continue to develop and reach to more schools increase during the coming school year.

C. School Transport plans

How pupils get to school is important insofar as a move towards more active and sustainable forms of travel can improve the physical health of individuals – both children and their parents - as well as having an impact on the local environment by reducing pollution and traffic congestion across the borough.

The Council supports schools to develop school transport plans setting out how the school will encourage increasing numbers of children to walk, cycle or travel by public transport rather than by car between home and school. Modest funding, provided by TfL is available from the Council to support active transport e.g. provision of cycle racks and or road safety improvements in the vicinity of the school.

D. National Child Measurement Programme (NCMP)

Schools are the venue for the national child measurement programme (NCMP). The NCMP was initiated in 2006/7 to measure the height and weight of children in reception class (aged 4 to 5 years) and year 6 (aged 10 to 11 years) to:

- inform local planning and delivery of services for children
- gather population-level data to allow analysis of trends in growth patterns and obesity
- increase public and professional understanding of weight issues in children and be a vehicle for engaging with children and families about healthy lifestyles and weight issues.

Since April 2013, local authorities have been under a legal obligation to ensure the NCMP programme is undertaken in all state maintained schools within their area. Children's heights and weights are measured and used to calculate a Body Mass Index (BMI) centile. The measurement process is overseen by school nurses. Participation in the programme is not compulsory, but non-participation is on an opt-out basis only. The data is submitted to the Health and Social Care Information Centre (HSCIC) which collates and validates all data centrally before publication. Parents receive a letter giving the findings of the assessment for their child with links to sources of reliable advice about healthy eating and physical activity and contact details for the school nursing service.

4.5.7 Other assets for children and young people

Away from school, a variety of schemes are in place to encourage children and young people to be active including:

- Havering Council's Health and Sports Development team organises a range of sport and physical activities for adults and young people across the borough throughout the year. During the summer holidays [programmes](#) of sporting activities are run for children aged 5 -11 and young people aged 11 – 18.

- The '[Swim4Everyone](#)' scheme allows children under eight to swim for free at Hornchurch Sports Centre, Central Park Leisure Centre and Chafford Sports Complex.
- A variety of cycling courses are provided by the Council for children and families (see cycling section below).
- The Havering Active [website](#) provides an up to date directory physical activity opportunities within the borough.

Perhaps the greatest asset the borough has is its young people. The views of peers can be particularly important to children and young people and we should consider how we involve young people in improving their own health.

The Youth Health Movement (www.youthhealthmovement.org.uk) website is a national hub for young people and youth organisations, and its aim is to provide young people with the skills, knowledge and confidence to act as peer mentors, increasing awareness of healthy lifestyles and encouraging involvement in activities to promote good health. It also provides the opportunity for young people and youth leaders to network and share ideas.

An integral part of the movement is the Certificate for Youth Health Champions, an RSPH's accredited qualification, which can be delivered either as a programme with supporting campaigns or as a stand-alone qualification. Youth health champions would complement the existing '*my health matters*' health champion project.

4.6 Tackling Inequalities in obesity

As described previously, the obesity epidemic has affected all groups, but some worse than others. There are very marked inequalities associated with social disadvantage particularly for women and children.

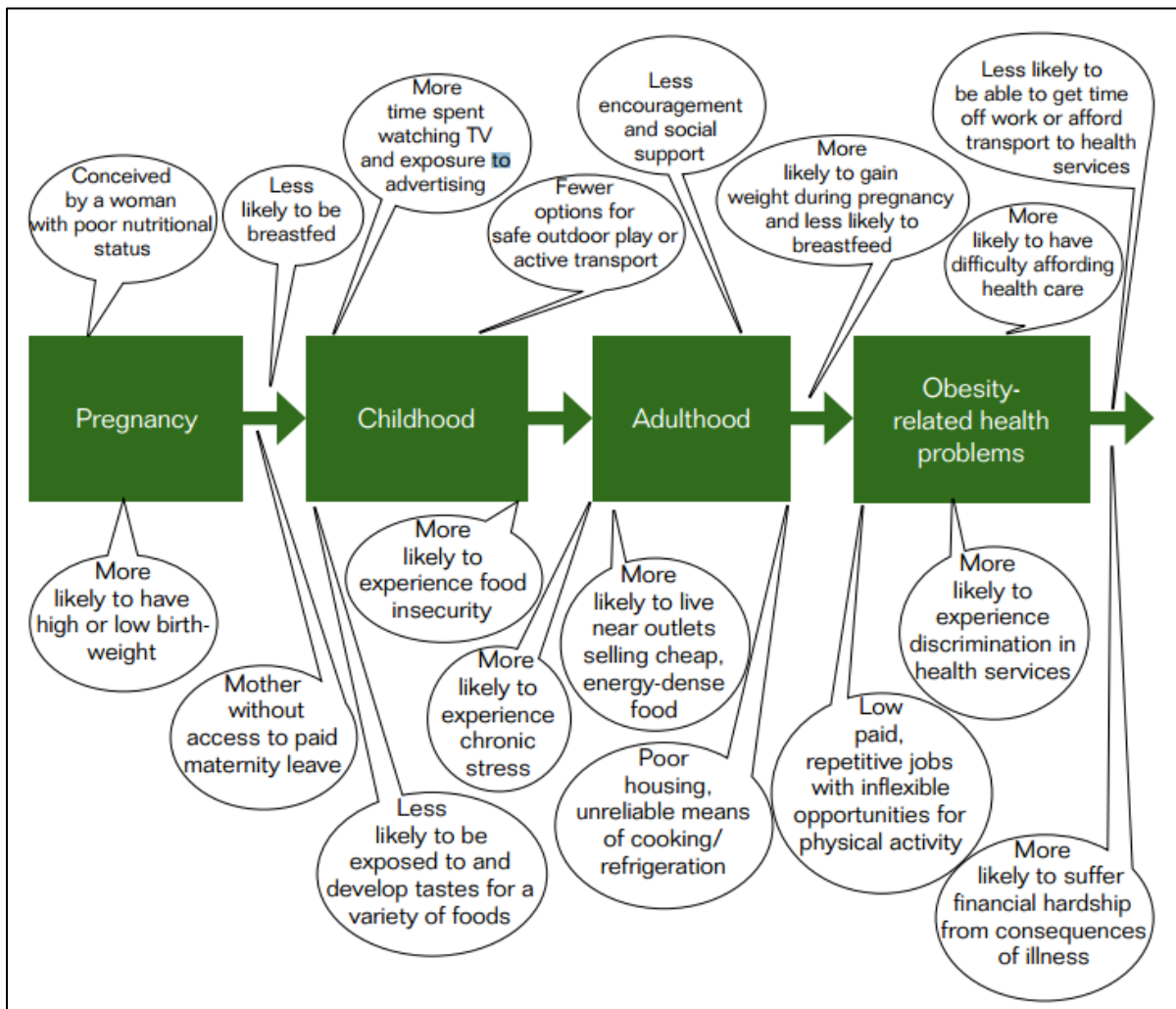
As described by Loring and Robertson¹¹⁹, maternal obesity and learnt unhealthy behaviours are the first in a series of insults that compound one another over the life course resulting in higher levels of obesity, ill-health and premature death – patterns which are transferred from one generation to the next.

However, this is not a counsel of despair. There is growing evidence that a number of strategies can be effective in preventing obesity throughout the life course^{120,121}:

- Promote healthy weight before, during and after pregnancy.
- Promote exclusive breastfeeding until 6 months of age, followed by appropriate introduction of a wide variety of foods, including vegetables, to support taste development.
- Promote healthy eating and physical activity through comprehensive preschool and school policies that preferentially include children from low socioeconomic families and actively engage girls in being physically active.
- Restrict marketing of food products high in fat, sugar and salt and beverages high in sugars to children.
- Reduce total fat content by eliminating trans-fats from processed foods.

- Regulate labelling to facilitate consumer knowledge and encourage reformulation of processed foods.
- Use subsidies to incentivize healthy food and taxes to disincentivise less-healthy purchases.
- Offer counselling for dietary change and increased physical activity in primary health care.
- Promote physical activity in workplaces via urban planning, and support active transport, with a focus on increasing walking and cycling.

Figure 53: How inequalities in obesity compound over the life course



Reproduced from Loring and Robertson, WHO, 2014.

Pre-pregnancy, pregnancy, infancy and early childhood are critical periods for interventions to reduce obesity inequities. As stated by Marmot:

*"Giving every child the best start in life is crucial to reducing health inequalities across the life course. . . ."*¹²²

Health visitors, working with early years staff, are uniquely placed to support with the transition to parenthood; breastfeeding and healthy weaning which are crucial to the

prevention of childhood obesity during the early years.¹²³ Strengthening Havering's under resourced health visiting team should be a priority – in line with Marmot recommendations: *"(We need) to increase the proportion of overall expenditure allocated (to early years, and it) should be focused proportionately across the social gradient to ensure effective support to parents, starting in pregnancy and continuing through the transition of the child into primary school. . . ."*

Support to early years should be coupled with action to shape the environment – ideally complemented by more rigorous action on the part of central government to push the food industry into product reformulation to reduce free sugar content.

Targeted action in schools and children's centres serving disadvantaged communities e.g. to promote greater uptake of school meals, improve cooking skills, increase levels of physical activity amongst girls and weight management support for obese women considering pregnancy should be considered.

The issues underlying the higher levels of obesity experienced by other population groups should be unpicked as above by relevant council officers, health professionals and community members to inform a similarly holistic action plan.

People with learning disabilities should be a priority given the consistent evidence of high levels of obesity, sedentary lifestyle and poor diet.

Next Steps

This needs assessment has been undertaken to inform development of an obesity prevention strategy requested by the Havering Health and Wellbeing Board. A strategy and action plan, and systems to effectively coordinate and report on progress are essential first steps.

The content must be decided on by the Health and Wellbeing Board, having considered the evidence presented here, but also the wider priorities of the Board and its constituent bodies, and the resources available to support delivery, both financial and human.

This assessment suggests 3 broad streams of work: -

- Shaping the environment to promote healthy eating and physical activity
- Supporting a culture that sees physical activity and healthy eating as the norm
- Prompting individuals to change, primarily through self-help.

A focus on children and young people – particularly the early years is essential, both to reduce levels of obesity amongst children – but also tackle the significant inequalities associated with social disadvantage.

Key opportunities to tackle obesity are within the gift of central Government rather than local partners e.g. regulation of the food industry. Local partners should take any opportunities that arise to encourage central Government to take effective action.

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