

**Open Report on behalf of Dr Tony Hill, Director of Public Health,  
Lincolnshire County Council**

Report to:	<b>Children and Young People Scrutiny Committee</b>
Date:	<b>25 April 2014</b>
Subject:	<b>Childhood Obesity – Progress Report following Director of Public Health Annual Report 2012</b>

**Summary:**

The obesity epidemic that this country faces not only has huge health implications for our population but has considerable financial implications for an already struggling National Health Service (NHS). The 2007 Foresight report 'Tackling Obesity: Future Choices' projected an annual real term cost of £50 billion by the year 2050 and that if left unchallenged "by 2050, Britain could be a mainly obese society". To put the forecasted cost into context, the annual cost of obesity to the NHS in 2001 was £480 million<sup>1</sup>.

An increase in obesity related illnesses such as Type 2 Diabetes, Hypertension, Coronary Heart Disease (CHD) and Stroke, Sleep Apnoea, Cancer and Osteoarthritis<sup>(1)</sup> could see the UK's life expectancy figures decline for the first time in modern history. It is now seven years since the Foresight report was published and, "if anything, the figures quoted above are seen as optimistic by the National Obesity Forum".<sup>2</sup>

Childhood obesity is an important issue that crosses a number of policy areas at a national and local level. Key policies in relation to childhood obesity include: [Healthy Weight, Healthy Lives: A Cross-Government Strategy for England \(2008\)](#) which outlined the ambition to be the first major nation to reverse the rising tide of obesity and overweight in the population. The initial focus of this strategy was on children, with the goal of reducing the proportion of overweight and obese children to the 2000 levels by 2020.

[Healthy Lives, Healthy People: Our strategy for public health in England \(2010\)](#), a white paper published by the coalition government, established a commitment to improving public health and tackling causes of premature death and illness, including obesity. Policy changes have also led to the move of public health into local government, the establishment of the new Public Health England and the establishment of GP commissioning groups. These important changes provide a new landscape into which this strategy is being developed.

<sup>1</sup> **The Office for National Statistics** . Historic and Projected Mortality Data from the Period and Cohort Life Tables, 2012-based,UK,1981-2062. *The Office for National Statistics* . [Online] December 11, 2013. [Cited: January 3, 2014.] <http://www.ons.gov.uk/ons/rel/lifetables/historic-and-projected-data-from-the-period-and-cohort-life-tables/2012-based/stb-2012-based.html>.

<sup>2</sup> **Haslam, D.** *State of the Nations Waistline* .P.3 s.l. : The National Obesity Forum , 2014.

[Healthy Lives, Healthy People: A call to action on obesity in England \(2011\)](#)

outlines the ambition to see “a sustained downward trend in the level of excess weight in children by 2020 and a downward trend in the level of excess weight averaged across all adults by 2020”. Aspects of the approach include:

- Giving local government a lead role in improving health and implementing strategies to tackle obesity.
- The adoption of a ‘Life Course Approach’ that recognises the specific opportunities and challenges of particular stages of life.
- A focus on empowering individuals.
- Giving partners the opportunity to play their full part.
- Building the evidence base.

[The School Food Plan 2013](#) is an independent review of school meals carried out by John Vincent & Henry Dimbleby at the request of the Secretary for Education, Michael Gove. The plan sets out key goals and targets that need to be met to improve the quality of school meals, as well as the financial viability of meals within schools. 'The Plan is about good food and happiness. It is about the pleasure of growing, cooking and eating proper food. It is also about improving the academic performance of our children and the health of our nation.'

The National Child Measurement Programme (NCMP) data in Lincolnshire gives us increasingly robust intelligence. The proportion of Lincolnshire's children who are overweight has increased since 2006/07 amongst children in Reception and in Year 6. However, these proportions have remained reasonably stable since 2009/10, so although there is no sign yet of a decrease in excess weight in children, there is evidence that the rate of increase has slowed.

This data supports and informs the broad range interventions to reduce childhood obesity levels across Lincolnshire. We cannot afford to be complacent, and all areas of Lincolnshire require a consistent life course approach to reducing childhood obesity, although the data supports specific interventions where the need is greatest. In Lincolnshire we are utilising a Life Course strategic approach to reducing childhood obesity: from pregnancy, early years pre-school, school years and beyond.

In summary, people in Lincolnshire, similar to the rest of the UK and developed world, live in what experts call an 'obesigenic' environment now. Government bodies at all levels have been slow in identifying trends in population body mass; slow in identifying interventions and the interventions available are generally too small in scale to address the opposing pressures.

The failure of services commissioned in Lincolnshire to achieve measurable improvement in childhood obesity to date has been highlighted by the service reviews undertaken since Public Health joined the Council. This has prompted a decision to re-design services, changing some and adding others in.

**Actions Required:**

To consider progress made in managing childhood obesity since the Director of Public Health made his annual report for 2012.

**1. Background****What is childhood obesity?**

Overweight and obesity are terms used to describe an excess of body fat which results from an energy imbalance where more energy is taken in compared to what is consumed.

Within the UK, overweight and obesity are assessed among adults using the Body Mass Index (BMI). For children, there are no clearly defined BMI criteria as weight and height vary considerably depending upon age and stage of development. Instead, overweight and obesity are defined for children using the British 1990 growth reference charts where the weight status of the child is classified according to their age and sex. Children with a weight at or above the 95<sup>th</sup> centile are classified as obese and children between the 85<sup>th</sup> and 95<sup>th</sup> centiles are classified as overweight. Because this method of measurement takes into account the age and gender of the child and matches it with measurements taken from British children before the current high levels of obesity were observed, it is widely acknowledged to be the most accurate way to identify weight problems in children under 12 years of age.

**Classification of children's BMI**

Classification	BMI Centile
Underweight	≤2 <sup>nd</sup> centile
Healthy Weight	2 <sup>nd</sup> centile – 84.9 <sup>th</sup> centile
Overweight	85 <sup>th</sup> centile – 94.5 <sup>th</sup> centile
Obese	≥95 <sup>th</sup> centile

Children who are overweight or obese early in life are at greater risk of developing serious health problems as young adults if they do not reduce their weight to a healthy level. These risks include the development of type 2 diabetes, high blood pressure, heart disease and certain types of cancers. The psychological problems associated with being an overweight child are also evident, with self esteem, confidence and overall life aspirations potentially being affected negatively.

The health, social and personal cost associated with the consistent increase in the numbers of children and adults who are not maintaining a healthy weight will undoubtedly overwhelm both services and personal lives in the future if these rising statistical trends are not reversed.

This report focuses on the issue of childhood obesity and achieving and maintaining a healthy weight. However, it is perhaps worth considering some of the detrimental health factors which are likely to prevail within the adult state should this issue not be effectively tackled at the earliest opportunity. Around two thirds of children who are obese are also more likely to sustain their obese condition as they progress into adulthood. Being obese or overweight brings significant risks at a range of different points throughout life (NHS Information Centre 2011). The health risks for adults who do not maintain a healthy weight status are somewhat concerning. Evidence suggests that, when compared with an adult healthy weight male, an obese male is:

- Five times more likely to develop type 2 diabetes
- Three times more likely to develop cancer of the colon
- More than two and a half times more likely to develop high blood pressure, which is a major risk factor for stroke and heart disease

Similarly, an obese woman, compared with a healthy weight woman, is:

- Almost thirteen times more likely to develop type 2 diabetes
- More than four times more likely to develop high blood pressure
- More than three times more likely to have a heart attack

Obesity also presents heightened risks for developing other problematic health conditions, including angina, gall bladder disease, liver disease, ovarian cancer, osteoarthritis and stroke. Evidence indicates that maintaining a stable healthy weight can offer health benefits for cancer survivors as it is apparent that both survival and recurrence of cancer may be adversely affected by obesity. As an example, statistics tend to show that obesity appears to increase the risk of recurrence and death among breast cancer survivors by around one third of individuals affected by this condition (Department of Health 2010).

### **Antenatal and postnatal risks**

Data indicates that during pregnancy and childbirth, obesity presents a series of health risks to the foetus, the infant and the mother. Obesity in pregnancy is associated with an increased risk of serious adverse outcomes, including miscarriage, foetal congenital anomaly, thromboembolism, gestational diabetes, pre-eclampsia, dysfunctional labour, postpartum haemorrhage, wound infections, stillbirth and neonatal death.

Obese women also tend to contribute to a higher caesarean section rate and lower breastfeeding rate compared with women with a healthy Body Mass Index (BMI).

Research evidence also tells us that children of parents who are overweight or obese are more likely to have difficulty maintaining a healthy weight.

## National and Local Surveillance Data through the National Child Measurement Programme (NCMP)

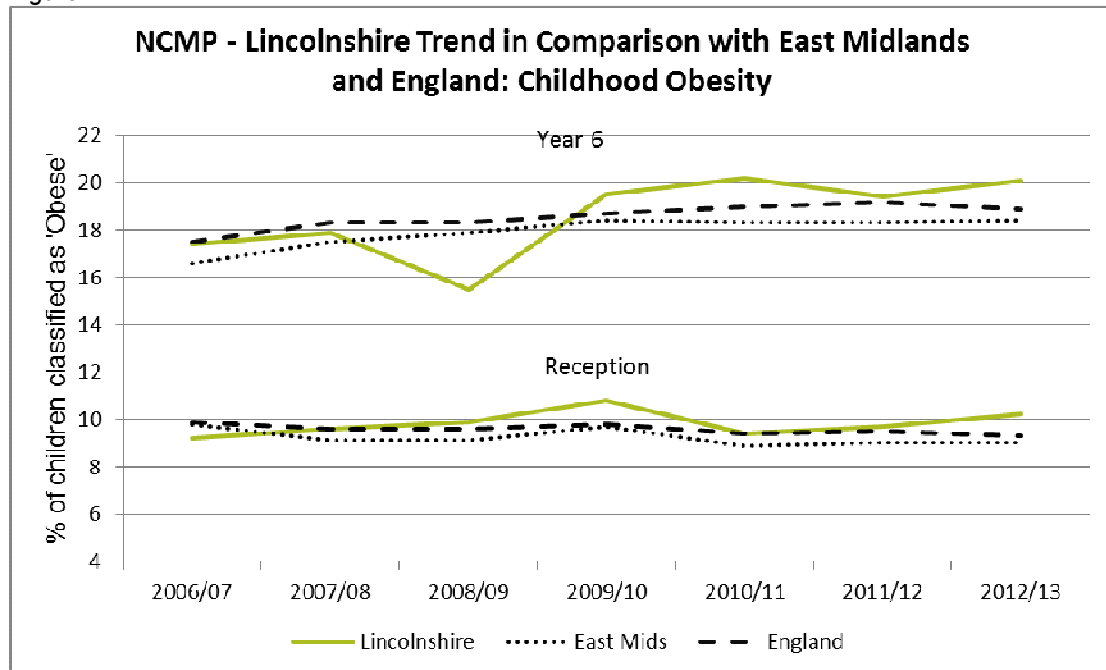
The NCMP takes place annually between September and June during the school academic year. The children involved are those in reception year (aged 4/5 years of age) and year 6 (aged 10/11 years of age).

Data from the National Child Measurement Programme demonstrates that the level of obesity amongst Lincolnshire's children is currently higher than both the England and East Midlands values, as can be seen in Figures 1 and 2 below. This highlights the importance of healthy lifestyle and weight reduction programmes in supporting schools, parents and children to make healthy choices and ultimately embed healthy lifestyles.

There are interventions currently commissioned that focus on healthy eating and on physical activity, and these are available to schools, children and families across Lincolnshire. The primary locations of these interventions are schools and Children's Centres.

As is mentioned in the summary above the proportion of Lincolnshire's children who are overweight has increased since 2006/07 amongst children in Reception and in Year 6. However these proportions have remained reasonably stable since 2009/10, so although there is no sign yet of a decrease in excess weight in children, there is evidence here that the rate of increase has slowed.

Figure 1:



Source: NHS Lincolnshire 2010/11

Figure 2:

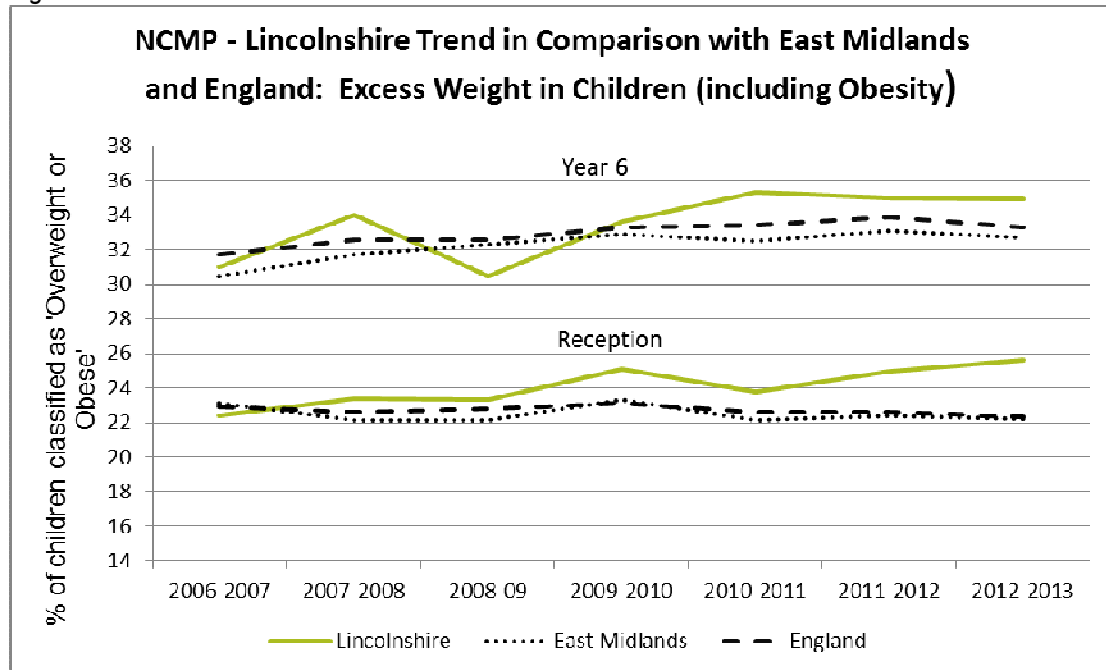
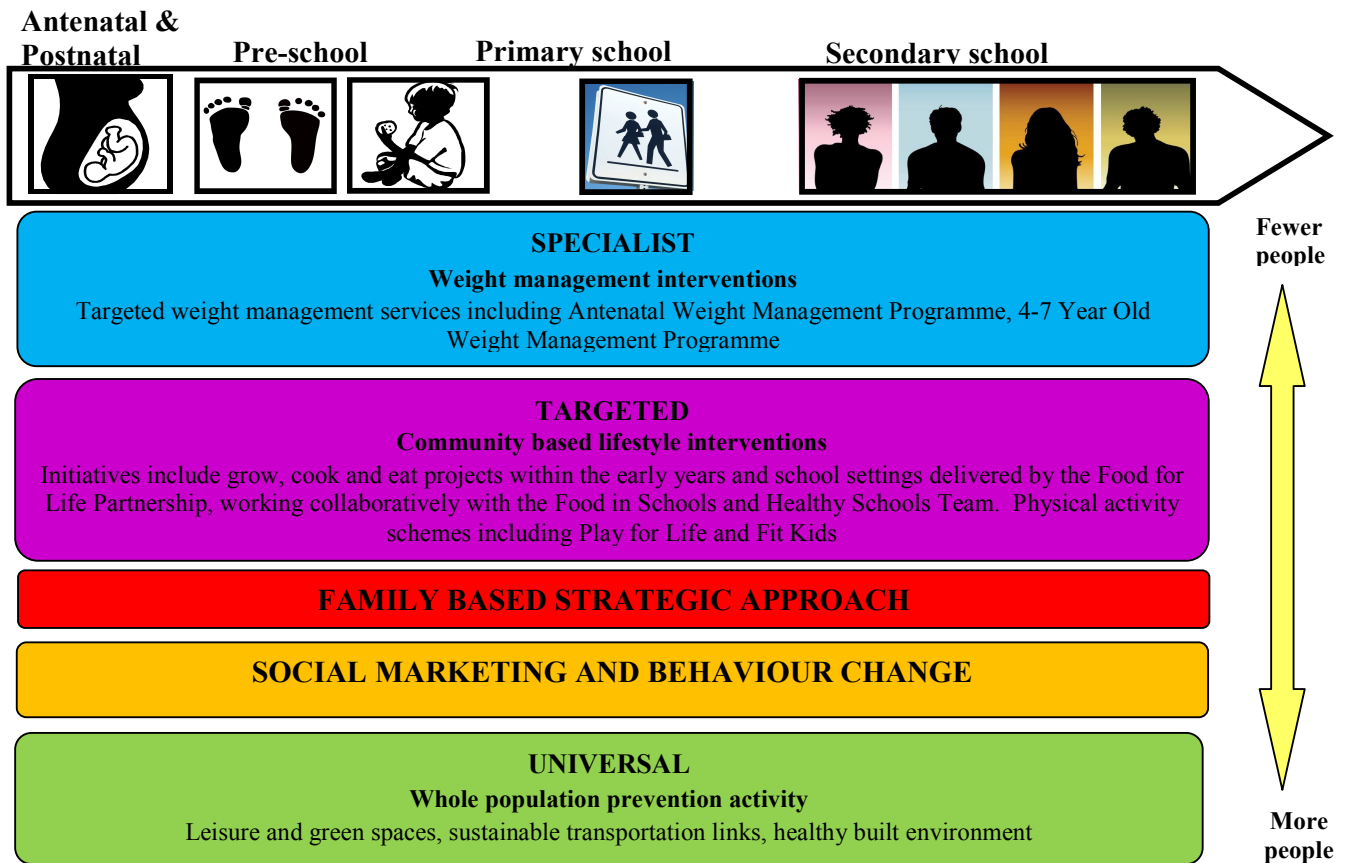


Figure 2 illustrates the levels of children measured as being overweight or obese in Lincolnshire remains above the East Midlands and England averages for both reception year and year 6 children.

### Implementing a life course approach to reduce childhood obesity

The 'Life Course' approach recognises that there are important stages in peoples' lives where they are more likely to change their behaviour or come into contact with health services. We have taken this evidence-based approach as one of the key themes for tackling childhood obesity in Lincolnshire to ensure that we provide a comprehensive map of interventions to target children across their life stages. Over the last 12 months a number of interventions have been developed or are planned to be piloted in the near future according to this Life Course approach. Figure 12 shows the Life Course approach in Lincolnshire where a range of interventions are implemented at different tiers (universal, targeted and specialist).

Figure 12: Description of the Life Course approach to reducing Childhood Obesity in Lincolnshire



Descriptions and outcomes / outputs for the key initiatives implemented this year to combat childhood obesity are detailed below.

**Food for Life Partnership:** This organisation is commissioned to work with schools to provide teacher & supervisor training, food sourcing workshops, award ceremonies and school farmers' markets. Current interventions are underway in schools on the east coast, in Boston and in Lincoln.

**Healthy Schools:** This team are available to work with every school in the county. 353 schools have so far gained 'healthy school' status. There is a Healthy Eating Advisor currently working with Lincolnshire's schools and the Children's Food Trust's 'Eat Better, Start Better' programme. 45 schools are currently working towards 'Healthy Weight, Healthy Lives' priority (36 primary), and 4 have achieved this award.

**Beacon Healthy Lifestyles:** This is a new pilot intervention working in schools delivered by Healthy Schools staff working with the Food for Life Partnership.

**Fit Kids:** This is a dedicated weight-reduction programme for 7 to 11 year-olds. Sport Lincolnshire co-ordinate this scheme which runs in every Lincolnshire district. 217 children were enrolled in 2012/13 on the 12 week course of which 169 children

completed all 12 weeks. Referrals are taken from health professionals but many families self-refer.

**Play4Life:** This is a physical play intervention for children aged 0-5, consisting of an 8 week training course involving 2 hours of contact per week for parents, carers and childcare practitioners. Open to all, but focussed in areas of higher deprivation, it is primarily based in Children's Centres. The current target is 10 courses per year, and a total of 120 participants.

**Legacy Challenge:** This is a sports-based programme run by Inspire+ working with schools to train ambassadors (pupils and teachers), develop 'challenges' for pupils and to facilitate Change4Life sports clubs and their promotion.

**Antenatal Weight Management Service:** This service is based in both Lincoln County Hospital and Boston Pilgrim Hospital and works with new and expectant mothers to promote healthy behaviours.

**Early Years Healthy Weight/Healthy Lifestyle:** This is a new service that will be developed and rolled out post April 2014. Working with the Children's Centre team, this service will be offered in a number of Children's Centres around the county offering young parents/carers face to face and online tailored healthy weight/healthy lifestyle help and support.

**Health Visitors:** Lincolnshire Community Health Services (LCHS) health visiting staff work with all new mothers and families within the county and will encourage and support breastfeeding and healthy behaviours.

### **What more can be done?**

Services commissioned in Lincolnshire have not made sufficient progress to achieve measurable improvement in childhood obesity to date which has been highlighted by the service reviews undertaken since Public Health joined the Council. This has prompted a decision to re-design services, changing some and adding others in.

The government commissioned Foresight report 'Tackling Obesities: Future Choices' of 2007 identified that we currently live in an obesiogenic society in which there are multiple factors that contribute to our nation's growing waistlines.

Food companies have helped to develop a culture of "heat and serve"<sup>3</sup> meals which are high in calories and low in nutritional values. Many children are bringing their poor eating habits to the school canteen.

Children are being aggressively targeted by advertisers of high calorific, nutrient poor foods a practise that is carrying on unchallenged by successive governments. Local high-streets are becoming increasingly run down with the introduction of more out of town retail parks and the influx of fast food outlets and 24 hour shops

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<sup>3</sup> Moss, M. Salt, Sugar, Fat, How the food giants hooked us; 2013 p.66 Random House UK



promoting quick and easy foods. Our town planners are becoming more and more influential in our day to day living patterns and routines.

As the socio-economic gap between rich and poor grows in the UK, it is being noted that for the first time in our history the poor are getting fatter than the rich<sup>4</sup>. Pickett et al (2005) showed that in areas of greater inequality a higher total calorific intake was consumed<sup>5</sup>. Obesity is a complex problem and requires action to be taken by individuals and wider society if we are going to be successful in tackling the problem.

The local authority can play a key role in reducing the obesity epidemic. Access to green spaces and leisure facilities, the over representation of cheap fast food outlets and education of citizens is something that the local authority can influence. Below are some examples of how the local authority can tackle barriers and influence local behaviour as outlined by the national obesity observatory<sup>6</sup>.

### Parks and Green Spaces

Parks are the most frequently visited type of green space - representing 90% of overall green space use. Good quality and well maintained parks are more likely to be used and local residents report higher 'neighbourhood satisfaction' and better health as a result. Provision of high quality green space is significantly worse in deprived areas than in affluent areas. People in more deprived areas often live close to green spaces but they are infrequently used due to concerns about crime and safety. Research has shown that over half of people living in deprived areas would take more exercise if green spaces were improved. What can departments and services involved with green spaces do to tackle obesity?

- Work together to improve the provision of high quality, local, accessible and safe green space in line with recommendations by organisations including The Design Council CABI.
- Improve the aesthetics of green space, alongside appropriate safety and crime prevention initiatives to encourage people to use their local green space.
- Promote and encourage the use of existing green spaces.

### Transport

Increased reliance on the car over the last fifty years has contributed to a major decline in walking and cycling. Public Health England has produced a [report](#) that summarises the importance of action on obesity with a specific focus on active travel, and outlines the regulatory and policy approaches that can be taken.

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<sup>4</sup> Lang, T & Raynor. *Overcoming policy cacophony on obesity*. 165-181, London : Obesity reviews, 2006, Vol.

<sup>5</sup> Pickett, K.E., Kelly, S., Brunner, E., Lobstein, T., & Wilkinson, R.G. *Wider income gaps, Wider waistbands? A ecological study of obesity and income equality*. 670-674, s.l. : Journal of Epidemiology & Community Health , 2005, Vol. 59(8)

<sup>6</sup> <http://www.noo.org.uk/LA/tackling> accessed 26/3/14

Why is tackling obesity important to local authority departments and services involved with transport?

- Working to tackle obesity by boosting active travel supports the achievement of the active transport components of local transport plans.
- Active travel schemes (for example traffic-free routes linking schools to their communities) can be a more cost-effective investment option for local authorities than traditional transport schemes.
- Encouraging active travel is in line with evidence-based guidance from the National Institute of Health and Clinical Excellence (NICE). See NICE 'Physical Activity' and 'Walking and Cycling' local government briefings.
- Such work also supports the policy call to 'Take action on active travel' produced by the Association of Directors of Public Health, which recommends the allocation of 10% of transport budgets to active travel and 20mph speed limits in towns and villages.

### Planning and Environment

Planning and environment colleagues share common agendas concerned with access to physical activity, availability of healthy food choices, liveability and the quality of public spaces. These shared priorities create valuable opportunities for collaboration. What can Planning and Environment Departments and services do to tackle obesity?

- Increase access to, and opportunities for, physical activity and healthy food, for example provision of, and access to, green open space and opportunities for play and food growing.
- Ensure that health and wellbeing are prioritised and integrated throughout the planning system.
- Restrict access to unhealthy food choices, for example by working with existing hot food take aways and sandwich shops to reformulate their menus to reduce the sugar, salt and fat content of food and to provide healthy options and control the proliferation of hot food takeaways in specific areas, such as near schools. Protect land for food growing from inappropriate development, particularly the best and most versatile agricultural land.
- Conduct health impact assessments to ensure that all parties think about proposed developments from a health perspective, specifically the impact on levels of physical activity and healthy food choices.
- Provide training and support to elected members and senior officers in order to secure strong leadership and commitment to health at all levels and in all policies.

### Leisure and Culture

Access to appropriate leisure opportunities is a key factor in the prevention and management of obesity. Local authorities play an important role in the provision of opportunities for activity at all levels and stages of an obesity care pathway. Libraries and other local authority venues are important sources of information and signposting to local leisure opportunities and support services.

## Education and Learning

There are close links between health, education and achievement. Education departments, and through them schools, have key roles to play in tackling obesity. What can departments and services involved with education and learning do to tackle obesity?

- Encourage use of the school food plan. This plan contains a series of actions, each of which is the responsibility of a named person or organisation, outlining what needs to happen to transform what children eat at school, and how they learn about food.
- Encourage and support local Healthy Schools Programmes using Healthy Schools resources and toolkits. (These toolkits are still available although the programme ended in 2011.)
- Encourage participation in the 'Eat Better, Do Better' programme.
- Support initiatives in schools and communities to improve children's wellbeing and self-esteem through physical activity and healthy eating.
- Ensure that there is full participation in the National Child Measurement Programme so that trends in child weight can be reliably monitored.
- Health and Social Care
- Obesity increases the risk of many serious long term conditions such as psychiatric disorders, diabetes, cardiovascular, respiratory and liver disease, muscular skeletal disorders and some cancers. More advanced treatments for such diseases, along with greater life expectancy and increasing obesity prevalence, means that more people than ever are living in ill health. This presents significant challenges to the health and social care system.

## Housing

The type of housing and the communities in which people live have an impact on their access to opportunities to live a healthy and active life. Housing is closely linked to the provision of accessible, safe green space, which in turn can influence obesity. What can departments and services involved with housing do to tackle obesity?

- Improve availability of unstructured opportunities for physical activity, such as access to parks and open spaces and safe play areas.

### **3. Consultation**

#### **a) Policy Proofing Actions Required**

Not Applicable

#### 4. Background Papers

The following background papers as defined in the Local Government Act 1972 were relied upon in the writing of this report. <b>Document Title</b>	<b>Where the document can be viewed</b>
Healthy Weight, Healthy Lives: A Cross Government Strategy for England (2008)	<a href="http://webarchive.nationalarchives.gov.uk/20100407220245/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_084024.pdf">http://webarchive.nationalarchives.gov.uk/20100407220245/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_084024.pdf</a>
Healthy Lives, Healthy People: Our strategy for Public Health in England (2010)	<a href="https://www.gov.uk/government/publications/healthy-lives-healthy-people-our-strategy-for-public-health-in-england">https://www.gov.uk/government/publications/healthy-lives-healthy-people-our-strategy-for-public-health-in-england</a>
Healthy Lives, Healthy People: A call to action on obesity in England (2011)	<a href="https://www.gov.uk/government/publications/healthy-lives-healthy-people-a-call-to-action-on-obesity-in-england">https://www.gov.uk/government/publications/healthy-lives-healthy-people-a-call-to-action-on-obesity-in-england</a>
The School Food Plan (2013)	<a href="http://www.education.gov.uk/schoolfoodplan">http://www.education.gov.uk/schoolfoodplan</a>
Lincolnshire Joint Strategic Needs Assessment (2012)	<a href="http://www.research-lincs.org.uk/Joint-Strategic-Needs-Assessment.aspx">http://www.research-lincs.org.uk/Joint-Strategic-Needs-Assessment.aspx</a>
Lincolnshire Joint Health & Wellbeing Strategy 2013 -2018	<a href="http://www.lincolnshire.gov.uk/searchResults.aspx?qsearch=1&amp;keywords=joint+health+%26+wellbeing+strategy">http://www.lincolnshire.gov.uk/searchResults.aspx?qsearch=1&amp;keywords=joint+health+%26+wellbeing+strategy</a>

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