**Executive Summary**

The prevalence of obesity across most European countries appears to be increasing and with it, the health and economic burden of its associated diseases. It is estimated that European Union countries spend approximately 7% of their health care budgets on obesity-related diseases (Obesity Facts 2018).

Obesity is the second most common preventable cause of death after smoking in Britain today and is responsible for more than 9,000 premature deaths per year in England. Nationally, there was a marked increase in the proportion of adults that were obese from 15% in 1993 to 29% in 2017, having remained at a similar level since 2010 of between 25% and 27%. Levels for men were 13.2% in 1993 to 27.4% in 2017 and for women 16.4% to 30.0%. It is estimated that 64% of the adult population is overweight or obese. (Health Survey for England, 2017).
Excess weight and obesity is a significant and complex societal challenge and a key preventable cause of death and disease and a priority for public health. Almost three in four adults in the UK will be overweight or obese by 2035. Prevalence is predicted to increase across all income groups however the greatest impact is likely to be seen in low income groups and disadvantaged communities (Cancer Research UK & UK Health Forum, 2016). Evidence also suggests over the next twenty years rising levels of obesity could lead to an additional 4.62 million cases of type 2 diabetes 1.63 million cases of coronary heart diseases and 670,000 new cases of cancer undermining individual and family health and wellbeing, the economy and a wide range of services. Reducing obesity levels saves lives and reduces the risk of dying prematurely or becoming disabled through health conditions such as heart disease and type 2 diabetes. It is estimated that the NHS spent £5.1 billion on overweight and obesity related ill health in 2015/16, which is more than was spent on the police, fire service and judicial system (Childhood Obesity Plan, 2016).

Tackling obesity and its causes is high on the public health agenda, although PHE recognise that there is no single, simple solution and requires a whole systems approach. Excess weight and obesity pose significant health issues for children and adults across the life course, with significant implications for an individual’s physical and mental health. Public Health England (PHE,2018) propose there isn’t a single intervention that can tackle obesity on its own, at individual or population level, suggesting the causes of obesity are multi-factorial, including biological; physiological; psycho-social; behavioural; and environmental factors. This is echoed in recent research (Tackling obesity seriously: the time has come. The Lancet, April 2018), which notes that an initial step is to acknowledge a critical and challenging truth: the most important intervention to tackle obesity is to understand there is no single most important intervention.

This complexity was recognised by the Foresight, Tackling Obesities: Future Choices - Project Report, (2007) which described obesity as the result of a complex number of determinants with many of the drivers beyond the scope of individuals and behaviours. There is broad consensus that preventing and tackling obesity effectively requires the development of a sustained population 'whole systems approach', with co-ordinated policies and actions across individual, environmental and societal levels involving multiple sectors (including planning, housing, transport, children’s and adult’s services, business and health). However, twelve years on many areas are still grappling with the complex challenges of excess weight and obesity as the way we live, work, travel, play, shop and eat has been transformed greatly in recent decades.

In relation to childhood obesity, nearly a third of children aged 2 to 15 are overweight or obese and younger generations are becoming obese at earlier ages and staying obese for longer. Children from low income backgrounds and the most deprived areas have the highest obesity rates. Those aged 5 and from the poorest income groups are twice as likely to be obese compared to their most well-off peers and by age 11 they are three times as likely (Childhood Obesity: A Plan for Action, August 2016).

This JSNA covers the life course of residents in the City who are a diverse population with differing needs. Their health and wellbeing and attitudes are shaped by their upbringing, social status and experience. The health of Sunderland population is generally worse than the England average; life expectancy is 11.5 years lower for men and 8.7 years lower for
women in the most deprived areas of Sunderland compared to the least deprived areas (PHE 2018). Obesity varies by region but is generally more prevalent in the North of England and in Sunderland, estimated levels of adult excess weight, smoking and physical activity are worse than the England average. https://fingertips.phe.org.uk/profile/health-profiles. Taking this into account a whole system approach to supporting good health and wellbeing, enabling positive choices to support maintaining a healthy weight and accessing physical activity to reduce sedentary behaviour will in time impact on healthy life expectancy and reducing health inequalities.

In 2017/18, 69.2% of adults had excess weight; classified as either overweight or obese this is higher than both the North East (66.5%) and England (62.0%) average. In terms of children the Child Health Profile (2019) shows that Sunderland has higher than average levels of obesity. Compared with the England average the 2017-18 NCMP data shows Sunderland has a worse percentage of children with excess weight in:

- Reception (4 to 5 years old) at 25.5%. (England 22.4%)
- Year 6 (10 to 11 years old) at 40.9%. (England 34.3%).

National and Local Strategies and Plans

National

The 2015 review ‘Sugar reduction: the evidence for action’ concluded that a range of factors, including marketing, promotions, advertising and the amount of sugar in manufactured food, is contributing to an increase in sugar consumption.

The Child Obesity Plan (2016) is the government’s plan to reduce England’s rate of childhood obesity within the next 10 years by encouraging the food industry to cut the amount of sugar in food and drinks and for primary school children to eat more healthily and stay active. https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action

Chapter 2 (2018) outlines the actions the government will take towards its goal of halving childhood obesity and reducing the gap in obesity between children from the most and least deprived areas by 2030. https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action-chapter-2

The NHS Long-Term Plan (2019) plan signals a clear focus on prevention and influencing behaviour change with key public health priorities including type 2 diabetes, diet and obesity.

Local

There are a number of strategies and plans to support the Achieving Healthy Weight agenda:

The Core Strategy and Development Plan 2015-2033 through Strategic Priority 3 Healthy and safe communities aims to promote healthy lifestyles and ensuring the development of safe and inclusive communities, with facilities to meet daily needs that encourage social interaction and improve health & wellbeing for all. The Draft City Plan aims by 2030 for Sunderland to be a connected, international city with opportunities for all as a healthy city.
where everyone will have access to the same opportunities and life chances no matter
where they are born or live including more people living healthier longer lives.

Sunderland Public Health Strategy 2018’s vision for Sunderland is ‘People in Sunderland
reach their full potential throughout life whatever their circumstances’ through Objective 1:
Ensure children and young people start well and are supported to live healthy lives, with a
focus on promoting a healthy pregnancy, transition to parenthood, a healthy childhood and
reducing risk taking behaviour. Objective 2: Working with communities and stakeholders to
build community assets to make healthy choices with a focus on wider determinants of
health and a range of behaviours including smoking, alcohol, diet, physical activity and
sexual health. Objective 5: Provide Public Health advice to the Health and Social Care
system through a focus on cardiovascular disease, cancer, respiratory disease, dementia,
other mental health conditions, musculoskeletal conditions, healthy weight and high blood
pressure.

The Children & Young People’s Plan 2017-22 vision is to work together for children, young
people and families through Priority 2 for all children have the best start in life and Priority
3 for all children and young people enjoy good health and wellbeing.
Strategic Needs Assessment

1) Use title of JSNA

Healthy Weight

2) What is the need locally, both now and in the future?

Since 1946, every generation in the UK has been heavier than the previous one (Health Survey for England, 2016). Obesity is one of our most significant and complex challenges, undermining individual and family health and wellbeing, impacting on business and education, and contributing to significant costs across health, social care and a wide range of services. According to Public Health England obesity is costing the economy £27bn a year.

Figure one: Cost of obesity on the economy – Public Health England

Over the last 30 to 40 years the population has changed its relationship with food, this includes how we shop and where we eat as well as the foods available and how they are produced. Food is now more readily available; more heavily marketed, promoted and advertised and, in real terms, is much cheaper than ever before. All of the changes have resulted in over consumption.

The rapid increase in levels of obesity throughout the developed world has occurred in too short a time. The environment in which we live has become ‘obesogenic’, whereby the plentiful supply of energy dense, tasty food coupled with energy-saving lifestyle practices and devices means that it has become ‘normal’ to gain excess weight.

The causes of obesity are incredibly complex, genetic factors appear to influence the metabolism and distribution of body fat and are thought to contribute 25% to 40% to the causes of overweight and obesity, whilst for many it is a simple matter of an imbalance between energy intake and output. The government document Call to Action on Obesity in England states that increasing physical activity is important in maintaining a healthy weight.
however, for most people who are overweight or obese, eating and drinking less calorie
dense foods is key to sustaining weight loss.

Adults
Obesity is the second most common preventable cause of death after smoking in Britain
today and is responsible for more than 9,000 premature deaths per year in England.
Between 1993 and 2001, the prevalence of overweight including obesity increased from 53%
to 62% of adults in England. Since around 2001, the proportion of adults who are overweight
or obese has increased slightly and now stands at 64 in 2017. It is a long-standing trend that
more men than women are overweight, including obese 67.2% of men and 61.2% of women
in England in 2017 (Health Survey for England 2017). It is not possible to compare
Sunderland to England using the Health Survey for England, however comparison data for
Sunderland is available on PHOF using a different methodology. This shows that in 2017/18
69.2% of adults were overweight, in Sunderland compared with 62.0% for England (PHE
2018 based on Active Lives Survey).

The following population groups are more at risk of developing obesity or its complications
and should be considered in service planning as priorities:

- **Routine and manual occupations** - obesity is related to social disadvantage. Adults
  in semi-routine and routine occupations (using the National Statistics Socio-
  Economic Classification): 18.7% of women in managerial and professional
  households are obese compared with 29.1% of women in routine and semi-routine
  households.

- **Sex** - Overall, for women, obesity prevalence increases with greater levels of
deprivation, regardless of the measure used. For men, only occupation-based and
qualification-based measures show differences in obesity rates by levels of
deprivation.

- **Age** - There are differences in obesity prevalence by both age and sex. Prevalence
  of obesity is lowest in the 16-24-year age group, and generally higher in the older
  age groups among both men and women. There is a decline in prevalence in the
  oldest age group, which is particularly apparent in men. This pattern has remained
  consistent over time.

- **Ethnicity** - Women from Black African groups appear to have the highest prevalence
  of obesity and men from Chinese and Bangladeshi groups have the lowest. Women
  appear to have a higher prevalence in almost every minority ethnic group, with a
  significant difference between women and men among the Pakistani, Bangladeshi
  and Black African groups.

- **Education Attainment** - Highest level of educational attainment can be used as an
  indicator of socioeconomic status for both men and women, obesity prevalence
decreases with increasing levels of educational attainment, around 30% of men and
33% of women with no qualification are obese compared to 21% of men and 17% of
women with a degree or equivalent (Health and Social Care Information Centre
2010).

- **Mental health** - Obese is also linked with a range of chronic diseases, which also
display an association with mental health problems. The predicted prevalence of
anxiety and depression among adults aged 16-64 years by pre-2004 ward, based on
data from the 2000 National Psychiatric Morbidity Survey found prevalence as high
as up to 21% in some wards across Sunderland. (National Heart Foundation 2007)
By 2050 the prevalence of obesity is predicted to affect 60% of adult men, 50% of adult women. As the prevalence of obesity in England increases, it has become a major public health concern due to its association with serious chronic diseases and related morbidity and mortality. Better quality data for obesity prevalence is needed at local level. There is no data on the percentage of the BME community suffering from overweight or obesity for Sunderland and no data split by age and gender for overweight and obese adults. The only data for adults at Local Authority level are synthetic estimates for adult obesity, which are only estimates and not suitable for benchmarking.

According to national surveys and estimates, rates of unhealthy behaviours, for example poor diet, overweight and physical inactivity, amongst adults in Sunderland are higher than the England averages therefore tackling these lifestyle risk factors is a priority for Sunderland. Estimates suggest that there were 176 deaths in persons of all ages in Sunderland that were attributable to obesity; on average, each of these was associated with 9 years of life lost. According to local data from the Sunderland Adult Lifestyle Survey, 58.4% of the population self-reported as being overweight/obese. Wards with the highest overweight/obese percentages were Castle (66%), Houghton (63.3%), Redhill (63.7%) and Ryhope (62.2%). The survey also demonstrated that the adult population is similar to England in the proportion of the population meeting the 5 a day for fruit and vegetables, with the average number of fruit consumed per day at 2.6 and average portions of vegetables at 2.7, however the percentage meeting the recommended "five-a-day" at age 15 is significantly worse at 44.4% compared to 54.4% for England.

**Children**

There is a concern about the rise of childhood obesity and the implications of such obesity persisting into adulthood where at least 70% of obese children will go on to become obese adults with the risk of future obesity-related ill health greater as children get older. Worryingly, with 17% of children aged 2 to 15 obese and a further 13% of children overweight (but not obese), the Health Survey 2017 highlighted that some parents do not recognise that their children are overweight, leading to a concern that overweight and obesity has become normalised.

Whether a child is overweight or obese is determined by their BMI (body mass index), a ratio based on the child’s height and weight for their age. Children who are overweight or obese according to their BMI are classified as ‘carrying excess weight’. Childhood obesity is associated with a number of different problems; children who are overweight throughout childhood are more likely to become obese adults and develop diseases including diabetes and cardiovascular disease at a younger age. Childhood obesity is also associated with a higher chance of premature death and disability in adulthood. Obesity is preventable, and by preventing it early in childhood it means that some of the complex problems that arise as a result of obesity can be minimised in early adulthood and beyond.

The National Child Measurement Programme (NCMP) measures the height and weight of around one million school children in England every year and is used to calculate a Body Mass Index (BMI) centile to assess children’s healthy or unhealthy weight. This provides a detailed picture of the prevalence of child obesity and is a robust source of information to tackle the rise of obesity in the UK. The latest Sunderland figures for 2017/18 show that 25% of children in Year 6 (aged 10-11) were obese and a further 15.9% were overweight. Of children in Reception (aged 4-5), 11.4% were obese and another 14.0% were overweight.
This means over a third of 10-11-year old and over a fifth of 4-5-year old were overweight or obese.

In terms of children with Special Educational Needs who are excluded from the NCMP programme, evidence from the local Tier 3 children’s weight management service shows a growing demand over a 3-year period (2015-18), where referrals have gone up by over a third and review appointments have almost doubled. These are predominately Special Educational Needs referrals through consultants and are the main cohort of this service.

Some population groups are more at risk of developing obesity or its complications and should be considered in planning as priorities:

- **Children from low-income families** - Sunderland’s Child Poverty Needs Assessment identifies that there is a correlation between low income and a greater risk of obesity in childhood as well as adulthood
- **Children from families where at least one parent is obese** - the increased risk may be due to genetic and/or environmental reasons
- **Ethnic communities and increased risk of T2D** - BME groups now represent 4.1% of the Sunderland population, with a higher prevalence of diabetes within BME communities.
- **Deprivation and childhood obesity** - analysis of data from the NCMP shows that obesity prevalence among children in both Reception and Year 6 increases with increased socioeconomic deprivation (measured, for example, by the 2015 Index of Multiple Deprivation (IMD) score). In the 2015 IMD, Sunderland is in the 20% most deprived local authorities in England, ranked 38th out of 326; with 26% (12,600) of children living in low income families in a city with high levels of deprivation. Obesity prevalence of the most deprived 10% of the population is approximately twice that of the least deprived 10%.

Sunderland is in the top quartile of local authorities for child obesity at year 6 the latest 2017/18 data from the NCMP in Sunderland shows an increase across all indicators from the 2016/17 school year data. Although the healthy weight for Reception in 2017/18 is 73.8%, by Year 6 this decreases to 57.9% with each indicator showing a rise in unhealthy weight. The prevalence of obesity in reception is slightly higher to England at 11.4% and equates to around 1 in 10 children; however, obesity in year 6 is significantly worse rising to 25% equating to around 1 in 4 children. The combined 5-year data (2013/14 – 2017/18) for the Prevalence of obesity among year 6 children indicates a rise of over double the percentage for reception across all levels from national to regional to local.

<table>
<thead>
<tr>
<th>Year</th>
<th>National %</th>
<th>Regional %</th>
<th>Sunderland %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>9.4</td>
<td>10.6</td>
<td>10.9</td>
</tr>
<tr>
<td>6</td>
<td>19.6</td>
<td>22.1</td>
<td>23.8</td>
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https://fingertips.phe.org.uk/profile/national-child-measurement-programme/data
Graph one below shows overweight and obesity for Reception in each of the 25 wards over the 3 year data period (2015/16 – 2017/18).

Table one highlights the 10 wards out of 25 with the highest obesity prevalence in Reception children (age 4 to 5 years) for 2015/16 to 2017/18, however there are 10 wards which are above the North East average with fifteen wards above the England average of 9.5%.

<table>
<thead>
<tr>
<th>Ward</th>
<th>%</th>
<th>Ward</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>England (2017/18)</td>
<td>9.5</td>
<td>Washington West</td>
<td>13.2</td>
</tr>
<tr>
<td>North East (2017/18)</td>
<td>10.9</td>
<td>Redhill</td>
<td>12.6</td>
</tr>
<tr>
<td>Hendon</td>
<td>13.9</td>
<td>St Anne’s</td>
<td>12.5</td>
</tr>
<tr>
<td>Southwick</td>
<td>13.8</td>
<td>Ryhope</td>
<td>12.5</td>
</tr>
<tr>
<td>Castle</td>
<td>13.6</td>
<td>Hetton</td>
<td>12.3</td>
</tr>
<tr>
<td>Sandhill</td>
<td>13.2</td>
<td>Pallion</td>
<td>12.0</td>
</tr>
</tbody>
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Graph two below shows overweight and obesity for Year 6 in each of the 25 wards over the 3-year data period (2015/16 – 2017/18).

Table two highlights the 10 wards out of 25 with the highest obesity prevalence in year six children (age 10 to 11 years) for 2015/16 to 2017/18, there are 15 wards which are above the North East average with 22 wards above the England average of 20.1%.

<table>
<thead>
<tr>
<th>Ward</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>England (2016/17)</td>
<td>20.1</td>
<td>Houghton 27.6</td>
</tr>
<tr>
<td>North (2016/17)</td>
<td>22.8</td>
<td>Pallion 27.3</td>
</tr>
<tr>
<td>Redhill</td>
<td>30.5</td>
<td>Southwick 27.2</td>
</tr>
<tr>
<td>St Anne’s</td>
<td>29.8</td>
<td>Castle 26.7</td>
</tr>
<tr>
<td>Sandhill</td>
<td>28.1</td>
<td>Shiney Row 26.1</td>
</tr>
<tr>
<td>Millfield</td>
<td>27.8</td>
<td>Barnes 25.7</td>
</tr>
</tbody>
</table>
In terms of future demand most of the evidence suggests there is a strong correlation between excess weight in children and excess weight in their parents. The fundamental cause of excess weight and obesity is, at root, caused by an energy imbalance between energy intake through calories consumed exceeding the amount of calories expended through increasing sedentary lifestyles and the increasingly obesogenic local environment that contribute to this imbalance. Personal behavioral changes such as dietary and increasing physical activity patterns can be tackled to produce reductions in obesity in adults and weight management in children resulting in health and wellbeing benefits.

Physical Activity
Healthy Eating and promoting physical activity are a key part of a whole system approach to tackling obesity and supporting families to achieve and maintain a healthy weight. An active lifestyle which includes a good amount of physical activity is important for everyone, especially children. The current Chief Medical Officer physical activity guidelines (2018) state for:

- children and young people aged 5-18 years should engage in moderate to vigorous intensity physical activity for at least 60 minutes of per day and up to several hours;
- adults from 19 – 64 years should aim to be active daily and over a week this should add up to at least 150 minutes (2.5 hours) of moderate intensity activity in bouts of 10 minutes or more.

The amount of physical activity people undertake depends on many factors, including community service provision and accessibility, which can create inequality between areas and individuals. Data from the Sport England Active Lives Survey 2018 for both adults and children shows clear gaps in activity levels based on affluence which starts with children and young people (those from the most affluent families are more active than mid-affluent who are in turn more active that the least affluent families) and is carried into adult life (with people in lower socio-economic groups most likely to be inactive and least likely to be active).

The Adult Lifestyle Survey (2017) suggested 19.2% of adults aged 18 and over in Sunderland are physically inactive, i.e., they report doing at least 30 minutes of moderate physical activity on 0 days in a typical week; based on 2016 mid-year population estimates this would mean that in Sunderland we have around 43,000 adults aged 18 and over who are physically inactive. This demonstrates the need for interventions both now and in the future and identifies excess weight and obesity as being key contributors to tackling the prevention of ill health. It is recognised that if service providers are expected to meet increased demand (Obesity prevalence approximately doubling as detailed in the Foresight Report) then additional resource would be required. Despite this, the rate of increase in obesity has noticeably slowed and the initial projected estimates of the prevalence of obesity in 2030 are almost 10 percentage points lower than originally feared. Whist the rate of increase among primary school aged children has plateaued, it conceals a worrying increase in the disparities between the most affluent and the most deprived areas.

https://foresightprojects.blog.gov.uk/2017/

The Sunderland Children and Young People’s Health Related Behaviour Survey collects information on health and related behaviours from primary school children aged 8 to 11 and
secondary pupils aged 12-15. This supports the collection of robust information about children and young people’s lifestyles and is used to inform the Health and Wellbeing Strategy in the section for Children and Young People for Sunderland. The last survey was carried out in 2017, and the following information sourced from the results:

- Around 74% of year 6 pupils describe themselves as ‘fit’ or ‘very fit’
- The top physical activity for year 6 pupils is running (races or tag)
- 52% of boys and 57% of girls walked or scooted to secondary school
- 66% of secondary pupils enjoyed physical activity ‘quite a lot’ or ‘a lot’

There is significant inequality in physical activity in children such as major differences in activity levels between boys and girls, particularly as children get older:

- 43% of primary pupils said they exercised hard at least 5 times in the previous week, compared to 23% of secondary pupils, with boys generally more active than girls.
- 49% of year 6 boys and 37% of year 6 girls reported that they took part in hard exercise on at least 5 occasions compared to 27% of year 10 boys and 11% of year 10 girls.

A clear difference becomes apparent as pupils get older, with fewer girls saying they consider themselves fit.

Health Inequalities and Healthy Weight

Generally, across England, obesity rates are highest for children from the most deprived areas. Sunderland follows this trend between obesity levels and deprivation.

The Indices of Multiple Deprivation (2015) rank Sunderland in the 20% most deprived local authorities in England, ranked 38th out of 326; with 26% (12,600) of children living in low income families in a city with high levels of deprivation. Across all ages of children and young people in Sunderland, a range of indicators show that health outcomes are poorer than national comparators, e.g. in 2014 the proportion under 16 years living in poverty was 26% (12,615 Sunderland children and young people) compared to 20.1% nationally.

In 2017, the North East has approximately 159,207 children living in poverty (all poverty figures are after housing costs). The number of children living in low income families in Sunderland was 17,670 (31%). There were 4.1 million children living in poverty in the UK in 2016-17. That’s 30 per cent of children or 9 in a classroom of 30, making the school environment a key contributor to achieving a healthy weight.

3) What are the effective interventions?

A crucial factor in reviewing effective interventions to prevent or tackle obesity is to note that there is no one single most important intervention (Rutter 2012). The Foresight Report on Tackling Obesities (2007) and more recently Public Health England (2018) has shown, obesity is the result of a very large number of determinants with many of the drivers beyond the scope of individuals to influence.

There is broad consensus that preventing and tackling obesity effectively requires the development of a sustained ‘whole systems approach’, with co-ordinated health in all policies approach and actions across individual, environmental and societal levels involving multiple sectors (including planning, housing, transport, children’s and adult’s services, business and health). To support local planning Public Health England (PHE 2019) have a range of data and analysis tools available at https://www.gov.uk/guidance/phe-data-and-analysis-tools#obesity
A review, *Sugar reduction: the evidence for action*, concludes that a range of factors, including marketing, promotions, advertising and the amount of sugar in manufactured food, is contributing to an increase in sugar consumption. A correspondingly broad range of measures is needed in response. The evidence review shows that action to reduce sugar consumption levels could include, but is not limited to, reducing:

- the volume and number of price promotions in retail and restaurants
- the marketing and advertising of high sugar products to children
- the sugar content in and portion size of everyday food and drink products

The review also suggests consideration of a price increase, through a tax or a levy, as a means of reducing sugar intake, though this is likely to be less effective than the three measures set out above. Other conclusions from the review include setting a clear definition of high sugar foods; adopting the government buying standards for foods and catering services; delivering accredited training on diet and health to all who work in catering, fitness and leisure sectors; and continuing to raise awareness of practical steps to reduce sugar consumption.

The Department of Health commissioned an evidence review from PHE following publication of the draft SACN report on Carbohydrates and Health in June 2014. PHE has since reviewed hundreds of studies from around the world. Some of the findings include:

1. Children are exposed to a high volume of marketing and advertising in many forms.
2. Marketing in all its many forms consistently influences food preference, choice and purchasing in children and adults. End of aisle displays, for example, leads to a 50% increase in purchases of fizzy drinks.
3. Food promotions are more widespread in Britain than anywhere else in Europe, accounting for around 40% of all domestic food and drink spending. This increases the size of families shopping baskets by a fifth and means they are taking home 6% more sugar.
4. A structured sugar reformulation programme could lead to a significant reduction in sugar consumption. The evidence showed if the sugar content of soft drinks was reduced by half, the sugar consumption of children under 10 and adults over 19 would decrease by 5g and for those in between, 11g.
5. Increasing the price of high sugar food and drink, through taxation or a levy, is likely to reduce purchases of these products, at least in the short term.
6. The public sector spends £2.4 billion a year on catering. Requiring caterers all to follow the government buying standards for food and catering services will ensure accountability for providing food meeting nutritional standards.

There is NICE Guidance on:

- The Prevention of Overweight and Obesity in Adults and Children (CG43)
- The Identification, Assessment and Management of Overweight and Obesity in Children, Young People and Adults (CG189)
- PH2 - Four commonly used methods to increase physical activity
- PH8 - Physical activity and the environment
- PH13 – Promoting physical activity in the workplace
- PH27 - Weight management before, during and after pregnancy
A summary of evidence-based interventions for prevention of childhood obesity is available from the Cochrane Library where a recent Cochrane review highlighted evidence for what works in the prevention of overweight and obesity in children; concluding the following strategies to be effective in preventing overweight and obesity in children:

- Parental support and home activities that encourage children to be more active; eat more nutritious foods and spend less time on screen-based activities.
- Environments and cultural practices that support children eating healthier foods and being active throughout each day.
- A school curriculum that includes healthy eating, physical activity, body image and emotional wellbeing.
- Increased school sessions for physical activity and the development of movement skills throughout the week.
- Improvements in nutritional quality of the food supply in schools.
- Support for teachers and other school staff to implement health promotion strategies and activities (e.g. professional development, capacity building activities).

https://www.cochranelibrary.com

It is acknowledged that providing the right support to families during the first few years of a child’s life underpins the principle of giving every child the best start in life in order to reduce health inequalities across the life course. The benefits of positive interventions before birth and during the early years of childhood are realised both in the short term and over the entire life course, including sustained support for school aged children and young people through to preparation and transition to adulthood.

Current evidence shows that in addition to health promotion and education programmes that support healthy lifestyles, integrated multi-agency action is required to consciously change the obesogenic environment within which families live to prevent the continuing rise in obesity among children.

Long term sustainable change will only be achieved through the active engagement of a wide range of services, providers, schools, communities, families and individuals.

4) What is being done to locally to address this issue and how do we know this is making a difference?

There are a range of services and interventions across Sunderland which support individuals with behaviour change and encourage participation in physical activity however as the local evidence suggests this is not sufficient in tackling the growing issue of excess weight and obesity across all ages. We need to build on existing provision and take a system wide approach to changing perceptions and the wider issues which influence unhealthy
behaviours.

**Current services for adults include:**

**Steps to Health** - The Sunderland Move to Improve programme is aimed at people who suffer from long term medical conditions and can help them to improve your health and wellbeing through a supported programme of physical activity. Referrals can be made via a GP, Practice Nurse or other healthcare professional who believes that there would be benefit to the patient from taking part in a programme of structured physical activity. The programme lasts initially for 12 weeks with the option to continue for a further 12 weeks if required and agreed with the Move to Improve Consultant. Activities take place in a number of leisure and wellness centres across the city as well as community venues, parks and green spaces.

**Gateway to Healthy Opportunities** - To overcome the difficulties that many people have in navigating services to improve their health a public health hub is being developed that will be accessible and available to the local population and partners. The hub will provide information and signposting to enable people to improve their own health with a range of training, information and mobile apps. It will be a single (but not exclusive) point of contact, providing continued supported and information for people wanting to make healthier choices.

**Health Champions** - Whilst the hub will provide the support that people need who have decided to make a change, we recognise that some people need more encouragement to take that first step and so we will build on our successful Sunderland Health Champions programme to ensure that people who are thinking about making a change to improve their or other health are supported to do so. The Health Champions programme will enable us to build additional capacity and skills at a local community level to support their community’s wellbeing needs.

**Outreach** - We will take an asset based approach building on existing strengths in our neighbourhoods and communities. We will work across council and partners to maximise their contribution to reducing overweight and obesity.

**Further opportunities** - There are a range of Everyone Active leisure facilities across Sunderland providing programmes to support individuals and families to maintain a healthy weight through increasing physical activity. Tyne and Wear Sport provide a range of programmes to support the healthy weight agenda including, Education programmes, Active Workplaces and targeted work with high risk groups such as BAME communities and those with disabilities.

Sunderland BIG programme provides a wide range of community events to support the healthy weight agenda and the council actively promotes the use of its parks and green spaces to encourage active communities.

**Current Services for Children include:**

**Children Centres** - Children Centres in Sunderland offer a range of universal programmes to support early development such as Baby Massage, time for rhyme, busy bodies and Stay & Play. Within these sessions key messages are offered around health and child safety. There is also targeted provision including baby signing and weaning courses which Children Centre
activity workers received training for from the Senior Specialist Dietician as well as an initial pilot project to support families with pre-school children to maintain a healthy weight. There is partnership working with health colleagues to engage families into activities, including direct referrals to the breastfeeding support team for tongue tie and support with breastfeeding.

**0-19 Public Health Service** - Sunderland City Council commission the universal and targeted public health services which are crucial to providing support, improving outcomes and reducing inequalities in the 0-19 population. The Healthy Child Programme was developed by the Department of Health in 2009 and set out an evidence based programme of best practice, led by Specialist Community Public Health Nurses for both Health Visiting (0-5 years) and School Nursing (5 -19 years) to support building resilience to reduce costs in later life; identify families with additional needs and provide relevant support; improve wider factors which affect health and wellbeing; and support people to live healthy lifestyles and make healthy choices. Further guidance in 2016 identified several high impact areas including healthy weight, healthy nutrition with healthy weight supported through encouraging good maternal diet, breastfeeding, timely and appropriate weaning onto solid foods, a healthy family diet and levels of physical activity which are in line with guidelines – for example, pre-school children should have 60 minutes of activity a day; and improving lifestyles through health reviews and assessment support services to work with children, young people and families to stay healthy through positive choices and behaviour including oral health, nutrition and physical activity.

**Sunderland Lifestyle, Activity and Food (LAF) Programme** - The Sunderland Lifestyle Activity and Food (LAF) programme was commissioned by Sunderland City Council through Public Health, for children aged 5-15 years who have been identified as overweight, measured as above the 91st centile on the UK 1990 Body Mass Index (BMI) chart, living in Sunderland and registered with a Sunderland GP. The NCMP uses the same classification charts to identify if a child is a healthy weight, overweight or very overweight.

The programme, through a series of healthy lifestyle sessions, encouraged and supported children, teenagers and families to eat well, move more, and live longer.

Referral sources are predominately self-referral (86%) followed by GP’s and school nurses. Over a three-year period (2015-18) referrals had gone up over a third. All children on the programme complete pre and post questionnaires to provide a range of information to identify lifestyle behaviours. In addition, a range of body measurements are taken, including weight, height, Body Mass Index (BMI) and waist circumference. Whilst 100% of families completing the programme were satisfied with the experience, the following outcomes were achieved over 3 years (2015 – 2018) of intake:

<table>
<thead>
<tr>
<th>Outcome</th>
<th>15-16</th>
<th>16-17</th>
<th>17-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>children and families starting the programme completed</td>
<td>84/141</td>
<td>112/177</td>
<td>140/189</td>
</tr>
<tr>
<td>children reduced/maintained their weight</td>
<td>67/84 (80%)</td>
<td>81/112 (72%)</td>
<td>111/140 (79%)</td>
</tr>
<tr>
<td>of completers maintained physical activity after 12 months</td>
<td>85%</td>
<td>91%</td>
<td>83%</td>
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The service will have a name change to Change 4 Life delivered by Active Sunderland and is currently developing a universal offer for future delivery.

**National Child Measurement Programme and Proactive Follow Up by LAF** - The LAF Team carry out proactive follow-up from the NCMP programme with all primary schools which resulted in increased referrals from families for 2016/17, 2017/18 and 2018/19. This will continue under the Change 4 Life offer.

**Tier 3 Specialist Childhood Weight Management Service** - Specialist Tier 3 support is provided by the Senior Specialist Dietician. This is in the form of regular 1:1 appointments with occasional LAF Programme support, depending on the child and family’s needs and circumstances.

Over a 3 year period (2015-18), referrals had gone up by over a third and review appointments have almost doubled. These are predominately Special Educational Needs referrals through consultants and are the main cohort of this service. From June 2019, the CCG will provide this service within Dietetics provision.

### 5) What is the perspective of the public on this issue?

The Adult Lifestyle Survey 2017 gathered local data and service user perspective through a mixed methodology health and lifestyle survey of a representative 2.5% sample (5,571 persons) from the Sunderland population aged 18 years or over. This self reported data is gathered to inform the planning and development of local need and services. More information can be found at: Public Health Strategy/Intel/Adult Lifestyle Survey 2017/Profile - Healthy Weight

Research carried out in 2016 by NWA Social and Market Research highlighted that primary and secondary school staff felt the key issues and challenges faced by pupils they worked with were healthy eating and diet; exercise and inactivity; obesity and weight management and mental health issues. However, eating a healthy diet was a low priority for some young people with support in relation to body image a priority. Similarly, healthy eating, sugar reduction and keeping a healthy weight were relatively low priorities amongst parents.

The Senior Specialist Dietician referred to the need for involvement of the Family Nurse Partnership, Health Visiting and School Nursing as well as GP’s to support a flexible core offer enabling the monitoring of children’s weight and height more regularly to support early intervention such as first line healthy eating interventions; education to recognise unhealthy weight; and support to maintain a healthy weight as children develop.

Sunderland Health Related Behaviour 2017 Survey involved 4308 pupils from 14 primary and 14 secondary schools giving a snapshot of the behaviours of some children and young people in relation to healthy eating and physical activity this survey will be repeated in 2019.

0-19 recommendations based on NWA Social and Market Research 2016 and incorporated into the Harrogate Foundation Trust 0-19 contract include:

**Key recommendations:**
- need for involvement of the 0-19 Public Health Service as well as GP’s to support a
flexible core offer enabling the monitoring of children’s weight and height more regularly to support early intervention such as first line healthy eating interventions; education to recognise unhealthy weight; and support to maintain a healthy weight as children develop.

- Utilising health promotion opportunities through engagement in activity events and other settings and providers in the City as well as communication opportunities i.e. social media

Consistency of practice and information i.e. nutrition, [https://www.nhs.uk/live-well/eat-well/the-eatwell-guide/](https://www.nhs.uk/live-well/eat-well/the-eatwell-guide/)

6) Recommendations for commissioning and further needs assessment work

We recognise the impact that obesity has on a range of life chances for our children and young people resulting in emotional and behavioural harms alongside the physical impacts. It also often impacts throughout life leading to higher school absence and increased risk of an unhealthy weight as an adult with all of the health impacts that will bring. By working with our community, our vision is to ensure that as this issue is tackled, no child is left behind.

While local authorities are well placed to lead action to combat obesity and challenge effects of the obesogenic environment, they cannot do this alone. Success will require the development of a sustained ‘whole systems approach’, with co-ordinated policies and actions across individual, environmental and societal levels involving multiple sectors. Sunderland has a unique opportunity to deliver on this approach through the development of its new City Plan which is identifying “Healthy City” as one of three key themes.

We will take a whole system approach to implementing key objectives in the Sunderland City Plan including:

- Encourage 100% of schools to sign up to the Active Charter
- Encourage families to be more physically active and engage in the natural environment
- Sign up to the Healthy Weight Declaration
- Develop a Healthy Weight Alliance 3-year plan
- Implement a health in all policy approach to reducing obesity
- Implement opportunities to influence the local food environment

Continue to work with colleagues within SCC and partners to ensure that measures are taken to support a healthier environment and lifestyle. This can include maximising community assets such as parks and open spaces, community settings and facilities, the coastline and cycle routes as well as developing exercise interventions and facilitating opportunities for families to be active together in the community and the City and ensure services are provided for groups that may not access mainstream services.

To influence the public sector food procurement and sales and influence Sunderland City Council and Sunderland Clinical Commissioning Group commissioners to embed standards in contracts such as vending machines on our own premises and commissioned services such as hospitals and leisure centres.

Provide on-going training and CPD to a range of professionals and non-professionals staff at scale through the Sunderland Health Champion Programme and promoting ‘Making Every
Contact Count. The capacity for addressing obesity at scale could be achieved by empowering frontline workers and giving them the confidence and skills to engage with their patients and clients. We have the Sunderland Health Champion Programme which should be embedded within frontline services and contribute to a whole system approach.

Maximise the NHS Health Checks programme to include advise and referral to lifestyle services.

Children and Young People
Any future commissioning of services should seek to embed the high impact changes and evidence base in delivery. Specifically, the following recommendations should be considered.

Improve management of obesity and promotion of healthy weight in pregnancy

Maintain investment into a best start in life which focuses on maximising opportunities at key touch points throughout maternity and childhood (0-19) including collaboration with Together for Children, SCC commissioned services and local partnership to promote a sustainable approach to lower childhood obesity levels in Sunderland and improve health inequalities across the 0-19 population.

Maximise the NCMP measurement process as this data can be used to support local public health initiatives and inform the local planning and delivery of services for children, for example through the 0-19 Public Health service. Ensure opportunities for early identification and offers of support and intervention are utilised i.e. mandated and school readiness visits through health visiting; proactive intervention pre and post NCMP; better provision for pre-primary age children for example, preventative work with parents, grandparents and carers around basic cooking and nutrition skills and knowledge; utilising PHSE sessions; develop a communication plan to manage health promotion to ensure providers i.e. Together for Children continue to support Change4Life and other health promotion programmes in schools.

Review the support commissioned for children and families, in conjunction with the Clinical Commissioning Group, to ensure a Tier 1, Tier 2 and Tier 3 offer is in place with the aim to improve public health outcomes to support families to make healthy choices and ensuring the impact of unhealthy weight intervention and healthy lifestyle promotion is understood; making way for positive lifelong health outcomes for children, young people and families in Sunderland.

The is a need to consider welfare cuts implemented through the roll out of Universal Credit to some residents and the impact the changes to benefits has on the rise in poverty, inequalities and access to healthy choices.

EIA

Age
There is a strong relationship between deprivation and childhood obesity. Analysis of data from the NCMP shows that obesity prevalence among children in both Reception and Year 6 increases with increased socioeconomic deprivation (measured, for example, by the 2010 Index of Multiple Deprivation (IMD) score). Obesity prevalence of the most deprived 10% of the population is approximately twice that of the least deprived 10%.
The prevalence of obesity and overweight changes with age. Prevalence of obesity is lowest in the 16-24-year age group, and generally higher in the older age groups among both men and women. There is a decline in prevalence in the oldest age group, which is particularly apparent in men. This pattern has remained consistent over time.

Disability
There is limited data on disability and obesity. It is known that people with disabilities are more likely to be obese and have lower rates of physical activity than the general population. Children who have a limiting illness are more likely to be obese or overweight, particularly if they also have a learning disability. Being underweight and overweight are issues for people with learning disabilities. This relationship varies according to age and gender.

Mental Health
The relationship between obesity and common mental health disorders is complex. There are several theories about how the two are linked. Some researchers suggest that obesity can lead to common mental health disorders, whilst others have found that people with such disorders are more prone to obesity. Other studies have found no association between the two.

Sex
Overall, for women, obesity prevalence increases with greater levels of deprivation, regardless of the measure used. For men, only occupation-based and qualification-based measures show differences in obesity rates by levels of deprivation.

Highest level of educational attainment can be used as an indicator of socioeconomic status. For both men and women obesity prevalence decreases with increasing levels of educational attainment.

Marriage and Civil Partnership
There is no data relating to healthy lifestyle and marriages/ civil partnership people.

Pregnancy and maternity
Maternal obesity (defined as obesity during pregnancy) increases health risks for both the mother and child during and after pregnancy. Statistics on the prevalence of maternal obesity are not collected routinely in the UK, but trend data from the Health Survey for England show that the prevalence of obesity among women of childbearing age increased during the period 1997-2010. Women who are obese are significantly more likely to be older in pregnancy, to have a higher parity (number of pregnancies), and live in areas of high deprivation, compared with women who are not obese.

Race/Ethnicity
There is no straightforward relationship between obesity and ethnicity, with a complex interplay of factors affecting health in minority ethnic communities in the UK.

Obesity is linked to ethnicity: it is most prevalent among black African women (38%) and least prevalent among Chinese and Bangladeshi men (6%) (The NHS Information Centre 2006).

Religion/belief
There is no available evidence regarding religion or belief and overweight and obesity.

**Sexual Orientation**
There is no available evidence regarding sexual orientation and overweight and obesity.

**Gender reassignment**
There is no available evidence regarding gender reassignment and overweight and obesity.

### 7) Key contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Sue Perkin</td>
<td>Public Health Lead Obesity and Physical Activity</td>
</tr>
<tr>
<td>Karen Lightfoot Gencili</td>
<td>Public Health Practitioner Childhood Obesity</td>
</tr>
</tbody>
</table>

### References

- **Obesity Facts 2018.**

- **Health Survey for England, 2016.**

- **Health Survey for England, 2017.**

- **Cancer Research UK & UK Health Forum, 2016.**

- **Childhood Obesity Plan: A plan for action, 2016.**

- **PHE, 2018.**


- **Health Profiles**
  [https://fingertips.phe.org.uk/profile/health-profiles](https://fingertips.phe.org.uk/profile/health-profiles)

- **Child Health Profile (2017) Public Health Outcomes Framework**
NHS Long-Term Plan (2019)
https://www.england.nhs.uk/long-term-plan/

Sunderland Core Strategy and Development Plan 2015-2033

Sunderland Public Health Strategy 2018

Children & Young People’s Plan 2017-22

Health and Social Care Information Centre (2010)
National Heart Foundation (2007)

Sport England Active Lives Survey (2017)
https://www.sportengland.org/research/active-lives-survey/

2015 Index of Multiple Deprivation (IMD)

Nation Child Measurement Programme
https://fingertips.phe.org.uk/profile/national-child-measurement-programme/data

Physical Activity Guidelines

Foresight Report Revisited
https://foresightprojects.blog.gov.uk/2017/

Sunderland Adult Lifestyle Survey (2017)

Sunderland Children and Young People’s Health Related Behaviour Survey, 2017

Public Health England

Sugar reduction: the evidence for action

Cochrane review
https://www.cochranelibrary.com

Best Start in Life and Beyond: Improving public health outcomes for children, young people and families (2016), Commissioning Guides 1 to 4, Public Health England

Early Years and School Aged Years High Impact Areas (2016)
https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-
Healthy Child Programme – 0-19 years, (2016) Department of Health

The 1001 Critical Days: the importance of the conception to age 2 period (2013), Wave Trust.