

Bristol JSNA Chapter 2017-18

Healthy Weight – Children and Young People

Chapter information

| | |
|-------------------------------------|---|
| Chapter title | Healthy Weight – Children and Young People |
| Chapter reference group | Great Weight Steering Group and Joint Health subgroup of the Children and Young Peoples Partnership Board |
| Chapter author(s) | Rachel Cooke |
| Quality reviewed by who/date | Dr Jo Williams (05/10/2017) |
| Chapter endorsed by | Great Weight Steering Group and Joint Health subgroup of the Children and Young Peoples Partnership Board |
| Chapter approved by | JSNA Steering Group, Oct 2017 |
| Linked JSNA chapters | Healthy Weight (adults), Mental Health, Physical Activity, Sustainable Food and Breastfeeding. |

Executive Summary

Introduction

Reducing childhood obesity is both a local and national priority. The World Health Organisation, 2015 regards childhood obesity as one of the most serious global public health challenges for the 21st century stating 'obesity in childhood is associated with a wide range of serious health complications and an increased risk of premature onset of illnesses, including diabetes and heart disease'.

A Plan for Action the government childhood obesity report 2016 stated 'Today 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'. 'Reducing obesity levels will save lives as obesity doubles the risk of dying prematurely' The report also highlighted that 'The burden is falling hardest on those children from low-income backgrounds. Obesity rates are highest for children from the most deprived areas and this is getting worse'. In 2016, The Government's "A call to action" outlined that 'Long term sustainable change will only be achieved by the active engagement of schools, communities, families and individuals'.

Nationally the prevalence of overweight including obesity is 22.1 % of reception age children and 34.2% of Year 6 children.

In Bristol over a fifth of reception children were recorded as overweight or obese and in year 6 children it was over a third. In Bristol data for 2015/16 indicates prevalence of obesity including overweight at reception is 22.9% as compared to 22.1% nationally. For Year 6 the Bristol data is 35.6% as compared to the national figure of 34.2%.

The data for obesity at reception is 9.4% as compared to 9.3% national. For Year 6 the Bristol data is 21.2% as compared to the national figure of 19.8% The year 6 data for Bristol is significantly higher than the national average.

Bristol is a dynamic city and has overarching strategies such as The Great Weight Debate and the Sugar Smart campaign as well as many programmes already in place that target the modifiable risks factors, for example to improve activity and diet. In addition current tier 2 weight management programmes for children and young people are established and embedded within the local community. Future commissioning includes using an innovative family approach that aims to build capacity and use learning from previous years to plug the gaps identified. This needs assessment has highlighted key issues and recommendations for the future.

Key issues and gaps Key issues in Bristol

- There are rising levels of overweight and very overweight children aged 10 and 11 years which is concern, though still similar to England and lower than many of the core Cities.
- Rising rates of overweight and obesity levels in the Bristol East area
- Obesity has strong links to deprivation –both nationally and locally in Bristol
- Weight management services capacity is significantly less than the number of overweight / obese children and young people

Recommendations

Recommendations are based on gaps identified from the NICE audit, the current provision offer and outcomes of current services and recommendations from the draft Bristol Healthy Weight Strategy. These include:

Strategic

- Implement a Bristol Whole Systems and city-wide Approach to addressing Obesity.
- Implement the Healthy Weight Strategy Action Plan which includes recommendations of the JSNA chapter.
- Develop training programmes to ensure professionals are aware of the causes and support available to people to maintain a healthy weight.
- Ensure emotional health and wellbeing is embedded into the delivery of this strategy.
- Refresh and relaunch the Bristol Healthy Weight Pathway for children and young people.

Prevention

- Ensure wide communication and awareness of both the Great Weight Debate and the refreshed Healthy Weight Care pathway.
- Continue promoting the Sugar Smart Bristol Programme, across early years; Schools; Colleges; tier 2 providers and ensure the programme reaches all young people.

Early Years

- Engender healthy lifestyles throughout life with evidence based early intervention during the critical 1001 days of a child's life, from conception to age 2.
- Ensure early years, schools and other education settings make the environment health promoting and teach the skills for life required to lead healthy lifestyles.
- Include parents and carers e.g. in activities related to health/healthy environment' to support knowledge and skills development

Schools

- Ensure early years, schools and other education settings make the environment health promoting and teach the skills for life required to lead healthy lifestyles.
- Enable and empower communities to improve individuals and families' relationship with food
- Enable and empower communities to improve individuals and families' physical activity levels.
- Working in partnership with CCHP review and update the local NCMP feedback letter to parents and carers.
- Ensure sport, physical activity and recreational clubs and groups are inclusive and accessible to all.
- Ensure interventions are targeted towards vulnerable groups at highest risk of overweight.
- Promote Breakfast clubs in schools and the use of community breakfast clubs

- Increase support to build resilience for KS2/3 children regarding healthy weight by using the Healthy School programme.

Treatment

- Review, clarify and support the role of the GP, health visitors, family support workers and school nurses in their role within the NCMP programme and in identifying, signposting and supporting and identifying children and young people who are overweight and or obese as appropriate.
- Provide a behaviour change programme which will enable individuals and families to take action to reduce their weight through provision of information, guidance and coaching
- Continue to offer locally appropriate, accessible and evidence-based weight management services for children, young people, and families and ensure that this is widely promoted to raise awareness, increase referral rates and promote self-referral. In addition to ensure those at most need of support are aware and able to access services offered. This will be addressed via the Bristol Behaviour Change for healthier lifestyle programme procurement.
- Consider provision of intensive and longer programmes that include a psychological support element / support for the more severely obese children and young people t
- To consider and refer appropriately to social prescribing opportunities

Other

- All services offered to record service user feedback in order to continually improve service delivery.
- To bridge knowledge gaps identified by reviewing provider outcomes reported.
- Consider use of technology to offer support by quality assured apps.
- Evaluate interventions and services to identify local success and align resource accordingly
- To ensure data recorded includes equalities monitoring to improve local data set.

Note: Recommendations around policy and practice for Childrens informal physical activity and play opportunities will be covered in the Healthy Place chapter.

JSNA chapter report

A: What do we know?

1) Who is at risk and why?

What is the issue?

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health.

The National Obesity Observatory (NOO) states In England the British 1990 (UK90) growth reference charts should be used to determine the weight status of an individual child and population of children. BMI is classified as overweight (including obese) where it is greater or equal to the 85th centile.

NOO state that when measuring an individual child (for example in clinic or feeding back for the National Child Measurement Programme (NCMP) results to parents) weight status is defined using the UK90 growth charts clinical cut points which are as follows:

Measuring and interpreting BMI in children: Public Health England

| Measuring an individual child | | Measuring a population of children (NCMP) | |
|-------------------------------|------------------|---|----------------|
| ≤0.4 th centile | Very underweight | ≤2 nd centile | Underweight |
| ≤2 nd centile | Underweight | >2 - <85 th centile | Healthy weight |
| >2 - <91 centile | Healthy weight | ≥85 th centile | Overweight |
| ≥91 st centile | Overweight | ≥95 th centile | Obese |
| ≥98 th centile | Obese | | |
| ≥99.6 th centile | Severely obese | | |

N.B Clinically Obese is also called 'very overweight' in the NCMP parental feedback letters.

Reducing childhood obesity is both a local and national priority. The World Health Organisation(2015) regards childhood obesity as one of the most serious global public health challenges for the 21st century stating obesity in childhood is associated with a wide range of serious health complications and an increased risk of premature onset of illnesses, including diabetes and heart disease.

A Plan for Action the government childhood obesity report 2016 stated 'Today 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'. 'Reducing obesity levels will save lives as obesity doubles the risk of dying prematurely.' The report also highlighted that 'The burden is falling hardest on those children from low-income backgrounds. Obesity rates are highest for children from the most deprived areas and this is getting worse'. In 2016, The Governments A call to action outlined that 'Long term sustainable change will only be achieved by the active engagement of schools, communities, families and individuals'.

Also emphasising the priorities in 2017 the RCPCH released the report the State of the Child Report entitling it 'Child health in jeopardy due to an alarming gap between the rich and the poor', reflecting back to Marmot in 2010 who highlighted that 'Giving every child the best start in life is crucial to reducing health inequalities across the life course.

The health impacts of obesity

Health risks of overweight or obese children and young people are similar to those for adults; however the resulting disease is most likely to be seen in adulthood. Health risks include type 2 Diabetes, asthma, sleep apnoea, cardiovascular risk factors, musculoskeletal problems, and psychosocial / mental health problems. PHE, 2015 reported that the UK surveillance programme of children under 17 years of age found that 95% of those diagnosed with type 2 diabetes were overweight and 83% obese. Type 2 diabetes is increasing, particularly in children from minority ethnic groups who are at higher risk than white children.

The global rise in obesity and Type 2 diabetes among children and adolescents has led to an urgent call for action by the International Diabetes Federation 2010, which warns that the world is currently facing a twin epidemic of obesity and Type 2 diabetes in young people.

In addition obese children are more likely to suffer ill-health; be absent from school due to illness, experience health-related limitations and require more medical care than those within the healthy weight spectrum. Baird et al 2005 also reiterated that overweight or obese children and young people are more likely to become obese adults. Reducing obesity levels will save lives as obesity doubles the risk of dying prematurely (Pischoon, 2008)

N.B There is a JSNA chapter focussing on Healthy Weight for adults; this outlines the health impact for the adult population.

1.1 The Current Picture in England, (2015-16 school year)

<https://fingertips.phe.org.uk/profile/national-child-measurement-programme>

The National Child Measurement Programme (NCMP) was established as a programme to measure the height and weight of children in reception class (aged 4 to 5 years) and year 6 classes (aged 10 to 11 years) to assess overweight and obesity levels in children within primary schools. This data can be used to support local public health initiatives and inform the local planning and delivery of services for children.

Nationally the prevalence of overweight including obesity is 22.1 % of reception age children and 34.2% of Year 6 children.

Place Regionally across the UK there are variations when looking at the NCMP data. Overweight including obesity prevalence was seen to be highest in the North East, West Midlands and London whilst being lowest in the East of England, South East and South West. The figure for the South West is 21.9% of reception and 30.3% of Year 6 children as compared to the national figures of 22.1% and 34.2%, The South West figures are significantly lower than the national figures for both reception and Year 6 data.

Time The prevalence of obesity has increased nationally since 2014/15.

In reception children it increased from 9.1% to 9.3% and in year 6 from 19.1% to 19.8%.

Comparing current prevalence rates with the 2006/7 rates when the NCMP started reception year data showed 9.9% of to be obese meaning the current rates are lower. However in year 6 obesity prevalence is higher than in 2006/07 when data indicated 17.5% of Year 6 aged children were obese. However it should be noted that the first years of the NCMP data are known to be an underestimate for obesity prevalence for this older year group.

Person Over a fifth of reception children were recorded as overweight or obese. In year 6 children it was over a third. Obesity prevalence was seen to be higher for boys than girls in both age groups and obesity prevalence for children living in the most deprived areas in both age groups was more than double that of those living in the least deprived areas.

Children aged 5 and from the poorest income groups are twice as likely to be obese compared to their most well off counterparts and by age 11 they are three times as likely (Kelly, 2015). Prevalence between the most and least deprived areas has continued to increase over time. There is no straightforward link between excess weight and ethnicity. NOO state that different ethnic groups are associated with a range of different body shapes and different physiological responses to fat storage. Revised body mass index (BMI) thresholds and waist circumference measures have been recommended for South Asian populations who are at risk of chronic diseases and mortality at lower levels than European populations. An analysis nationally of trends in obesity prevalence by ethnic group using NCMP data found a clear trend of rising obesity prevalence for both boys and girls of Bangladeshi ethnicity, with no significant changes in any other ethnic groups, (NOO 2011).

1.2 Modifiable Health Risks that contribute to obesity

Everyone is at risk of becoming overweight. WHO 2015 outlined that the fundamental cause of obesity and overweight is an energy imbalance between calories consumed and calories expended. Globally, there has been:

- an increased intake of energy-dense foods that are high in fat; and
- an increase in physical inactivity due to the increasingly sedentary nature of many forms of

work, changing modes of transportation, and increasing urbanization. In addition Generation Active 2016 stated that there are now a multitude of sedentary activities and technologies designed to keep children entertained

WHO 2015 Recommendations focus on:

- increasing consumption of fruit and vegetables, as well as legumes, whole grains and nuts;
- limiting energy intake from total fats and shift fat consumption away from saturated fats to unsaturated fats;
- limiting the intake of sugars;
- children and young people of 5- 17 years being physically active - accumulate at least 60 minutes of regular, moderate- to vigorous-intensity activity each day that is developmentally appropriate

However it should be noted that there are many complex behavioural and social factors that combine to contribute to the causes of obesity, which are identified in the Foresight Report, 2007. This report presented an obesity system map with energy balance at its centre. Over 100 variables directly or indirectly influence energy balance.

1.2.1 Physical Activity

Analysis of the Global Burden of Diseases, Injuries and Risk Factors Study found physical inactivity and low physical activity to be the fourth most important risk factor for premature mortality in the UK. (Murray, 2013)

Being physically active is known to reduce the risk of many preventable diseases, from cancer to diabetes, and conditions like obesity and depression. In addition for children and young people activity has been shown to improve educational attainment. (Laureas, 2011)

WHO recommendations for physical activity are:

- Pre-school children who can walk unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day
- Under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

Children and young people of 5-18 years should also:

- engage in moderate to vigorous intensity physical activity for at least 60 minutes per day
- Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.

Children and young people should minimise the amount of time spent being sedentary (sitting) for extended periods.

Bhattacharjee, 2015 highlighted that the average child aged 5 to 17 years in the UK does not reach the minimum 60 minutes of moderate to vigorous intensity of physical activity daily, as recommended by the World Health Organisation. This report also confirmed that physical activity has also been linked to improved classroom behaviour of pupils, which can positively influence academic attainment. On undertaking a literature review findings indicated the majority of the studies reviewed suggest a positive association between physical activity and academic achievement and/or cognitive performance in school-aged children, both in adolescents and pre-adolescents, with varying strengths of association. Variability must be considered but nonetheless, on the basis of the findings, there appears to be sufficient evidence to support increasing physical activity in school children without a detrimental effect on academic performance and a positive effect on health.

This was reiterated by data from the WAY survey 2014 which reported only 14% of young people reported participating in at least one hour of moderate / vigorous activity. Young people from BME backgrounds were less likely than those from white backgrounds to meet recommended levels for activity (11% to 14%). Gender also had an impact with half the number of girls 9% reporting undertaking at least an hour moderate/ vigorous activity on all 7 days of the last week compared to 18% of boys. The BHF Physical Activity Statistic 2015 reported that in both boys and girls in England the proportion of children aged 5 to 15 years meeting activity recommendations fell between 2008 and 2012. A higher decline was observed amongst boys than girls. The largest declines were at age 13 to

15 years for both genders. In addition regional differences in children achieving physical activity recommendations were found. More than 25% of boys in the South East met recommendations, while only 13% did so in the South West.

Active Travel BHF 2015 reported two thirds of boys and girls in England walk to school at least once a week. The proportion of children cycling to school remains low, with just 6% of boys and 1% of girls riding to school in 2012.

1.2.2 Sedentary Behaviour It has been seen that a higher proportion of boys and girls were more sedentary on weekend days than weekdays in England in 2012 with 43% of boys and 37% of girls aged 13 to 15 sedentary for 6 hours or more on weekend days This data was stable when comparing genders and deprivation quintiles.

Findings from the WAY survey 2014, reported sedentary behaviour was also linked to ethnicity and deprivation with young people from an Asian background least likely to say they undertook sedentary activities for 10 hours or more per week and young people from the most deprived areas were more likely than those from less deprived areas to report 10 or more hours in sedentary activity Please note that this section links to the JSNA chapter covering Physical activity.

1.2.3 Sleep There has also been increasing evidence that quality sleep time is linked to obesity. Shorter sleep durations and poor sleep quality were positively associated with higher BMI, and it was demonstrated that this was partly, but strongly, connected to the use of technology at bedtime (Arora et al, 2013)

1.2.4 Diet and Nutrition The Global burden of disease outlined that low fruit and veg intake in high income countries was the seventh highest risk factor for cause of premature death

Fruit and vegetable intake The National Dietary Nutrition Survey, 2016 reported that just 8% of children and young people aged 11 to 18 years met the 5-A-Day recommendation for fruit and vegetable consumption. An average consumption for boys and girls aged 11 to 18 years was 3.0 and 2.7 portions per day respectively. 10% of boys and 7% of girls in this age group met the “5-a-day” recommendation. The WAY survey 2014, found just over half of 15 year olds surveyed reporting consuming 5 or more portion of fruit / vegetables the previous day with again those living in the most deprived areas being least likely to have consumed 5 A DAY the previous day.

However on a more positive note the National Dietary Nutrition Survey, 2016 highlighted a reduction in consumption of sugar sweetened beverages in children and young people of all ages. This is timely given the Scientific Advisory Committee on Nutrition (SACN) published their report on Carbohydrates and Health in 2015. Their Recommendations include:

- the population average intake of free sugars should be reduced to around 5% of dietary energy to reduce risk of weight gain and consequently type 2 diabetes
- consumption of sugars sweetened beverages should be minimized; there is evidence linking sugary drinks to weight gain and increased intake of these beverages is associated with higher risk of type 2 diabetes

Breakfast While some studies have found links between skipping breakfast and obesity, skipping any of the day’s meals, is not advised as part of a healthy intake. Establishing a routine eating pattern has been shown to improve glycaemic control, reduce likelihood of weight gain and help keep hunger pangs at bay. It is estimated that ~ one third of children and young people skip breakfast with the main reason being given as time.

School Meal uptake In 2009 the Children’s Food Trust found that consistent with previous research, healthier food and drink items were chosen and eaten more frequently by pupils taking a school lunch than those bringing a packed lunch, and packed lunches often included items restricted in school lunches due to the national school food standards. Average nutrient intakes from school lunches as eaten were more often in line with healthy eating recommendations than intakes from packed

lunches. With limited national data on school meals uptake, the Children's Food Trust 2016 State of the Nation Report identified that an estimated 5.4m school age children in the UK have school meals. The rest – estimated 4.8m children – go home for lunch, bring a lunchbox or eat off-site. The same report also stated that Chocolate biscuits, cereal bars, crisps and sugary drinks continue to be staples of children's lunchboxes in the UK,

The DfE annual school census 2016 showed positive news that 1.6 million infant school children are opting for school lunch through the Universal Infant Free School Meal scheme. However the census also indicated that almost 15 per cent of infant school children still are not taking up the free meal that they're entitled to.

Breastfeeding There is a link between breastfeeding rates and overweight or obesity in children, with breastfed children being less likely to experience overweight. Please see the JSNA for Breastfeeding.

Weaning There is some evidence that indicates weaning and parenting styles can have an impact on childhood obesity. Research has shown that parenting style, parental modelling, family routine and lifestyle, responsive feeding, infant feeding, use of food for non-nutritional purposes, exposure to television and disordered sleep are all factors associated with childhood obesity Rudolf 2010. It is suggested that these behaviours may be easier to change in the preschool years though there is little evidence to support this as yet. Barlow et al, 2010 identified that offering intensive support at the weaning stage to families with young children who were identified as high risk of obesity could have an impact. Results indicated parents reporting not only increased knowledge about the most appropriate types and amount of food to feed their toddler but also more far-reaching changes within the family as a whole, including modifications to their own diet and lifestyle.

1.3 What Children and Young People have to say about healthy weight and support needed

The Way Survey 2014 found that young people (15 year olds) who think of themselves as 'too fat; or 'too thin' reported being cyber bullied more than those who think their body was about 'the right size' with an increase of 5% from 15 to 20% respectively. Bullying in general due to other people making fun because of body weight was also reported by 13% of the 15 year olds.

A further systematic review found that young people did not necessarily relate a large body size with ill health. More emphasis was placed on relationships. The young people surveyed also reported overweight young people would not be respected and can be totally dismissed by their peers, they also reported being picked on because of their size. Whilst frustrated at the time needed for substantial weight loss the young people identified that individual responsibility was needed to be successful at losing weight. They identified support needed as including access to non-judgemental support and psychological resources. There has also been a need recognised for additional support around emotional health and wellbeing for both the children and young people; parents and carers when considering healthy weight issues. This links well to research by the Association for Young People's Health who found that young people between ages 12-19yrs reported wanting support to access counselling and to be able to 'talk to people who have been there'. Parents / carers reporting programmes and support need further focus on emotional health and wellbeing, and support for parents and young people to make a decision – e.g. effective self-assessment tools. (Please note for more information, there is a separate JSNA chapter relating to emotional health and wellbeing). The European Youth Tackling Obesity 2015 identified they need for consistent positive and inspirational messaging to support weight loss, a youth to youth peer support approach, effective targeting of vulnerable groups and a family model building capacity of parents. Interestingly, findings from the association of young people highlighted that young people thought offers of gym passes and activity sessions should be offered as incentives to support weight loss, this thought was reiterated by parents and carers of overweight children.

The 2016 Government obesity strategy outlined a recommendation that health professionals should feel confident in discussing weight issues with children and families.

1.3.1 Barriers to achieving and maintaining a healthy weight

In a systematic review Shepherd, 2005 focusing on the wider determinants of health, examining community- and society-level interventions examined the barriers to, and facilitators of, healthy eating among young people (11–16 years). Barriers to healthy eating included:

- poor school meal provision
- ease of access to, relative cheapness of and personal taste preferences for fast food.

Facilitators of healthy eating included:

- support from family,
- wider availability of healthy foods,
- desire to look after one's appearance and
- Will-power.

In children and young people it is also recognised that family behaviours and the environment have an impact on behaviours such as food choices and physical activity.

2) What is the size of the issue in Bristol?

2.1 Person

In Bristol over a fifth of reception children were recorded as overweight or obese and in year 6 children it was over a third.

Bristol data for 2015/16 indicates prevalence of obesity including overweight at reception is 22.9% as compared to 22.1% nationally. For Year 6 the Bristol data is 35.6% as compared to the national figure of 34.2%.

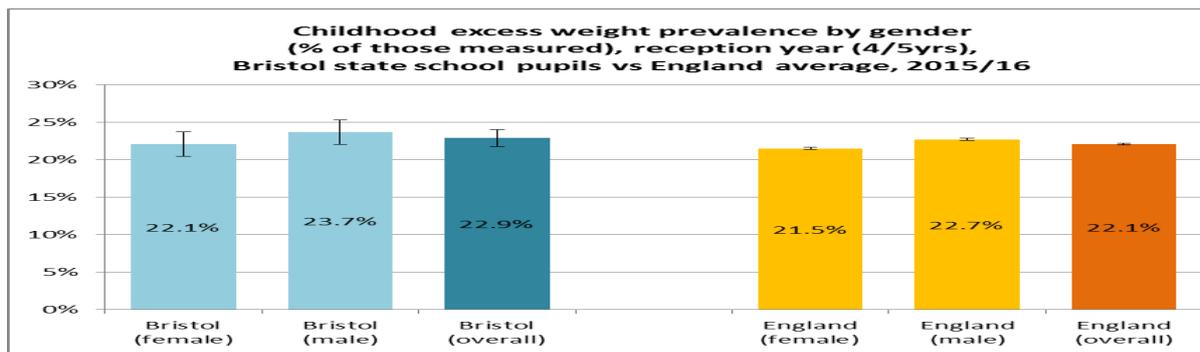
The data for obesity at reception is 9.4% as compared to 9.3% nationally. For Year 6 the Bristol data is 21.2% as compared to the national figure of 19.8% The year 6 data for Bristol is significantly higher than the national average.

2.1.1 Gender Bristol data is similar to the national data with obesity prevalence being higher for boys than girls in both age groups. NOO state that analysis of gender using the NCMP data from 2006/07 to 2014/15 shows a downward trend in obesity prevalence nationally among boys in Reception (4-5 year-olds) while the trend among girls of this age appears to be relatively stable over time. Obesity prevalence among boys and girls in Year 6 (10-11 year-olds) shows an upward trend, with a higher average increase in Year 6 girls than boys. However, over the last five years obesity prevalence among Year 6 boys and girls has been relatively stable

2.1.2 Ethnicity Data - Bristol data also indicated that in Year 6 Asian and Black children were significantly more likely than the city average in 2015/16 to be overweight or obese. Bristol does not have reliable data for ethnicity and reception children due to incomplete data.

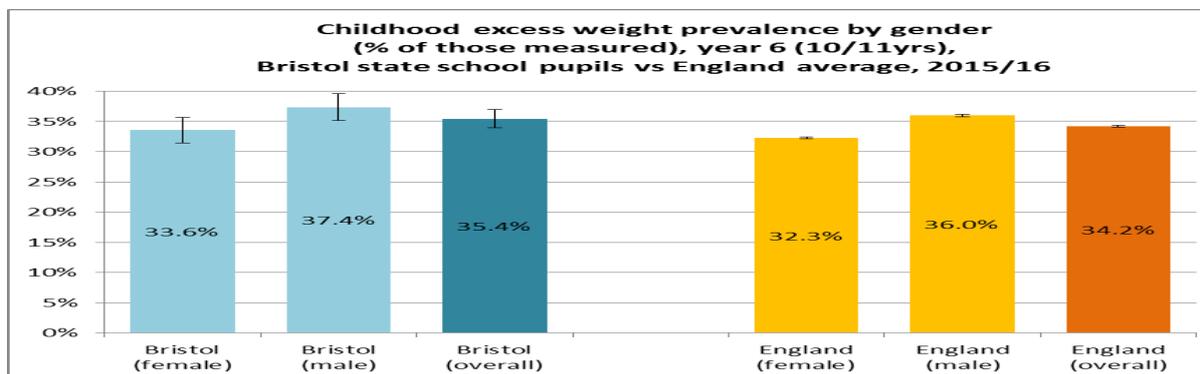
Reception children For reception age children (4-5 years old) 2014/2015 the data showed slightly more boys in Bristol (23.7%, 95% CI 22.0-25.3%) had excess weight than girls (22.1% 95% CI 20.5-23.7%), Figure 1 indicates that the Bristol overall prevalence at reception age is similar to the England average.

Figure 1 Childhood excess weight prevalence in Bristol by gender –Reception year 2015/16



Year 6 children For the Year 6 age children (10-11 years old) 2014/ 2015 data showed more 10-11 year old boys in Bristol (37.4%, 95% CI 35.2-39.5%) have excess weight than girls (33.6% 95% CI 31.4-35.7%)

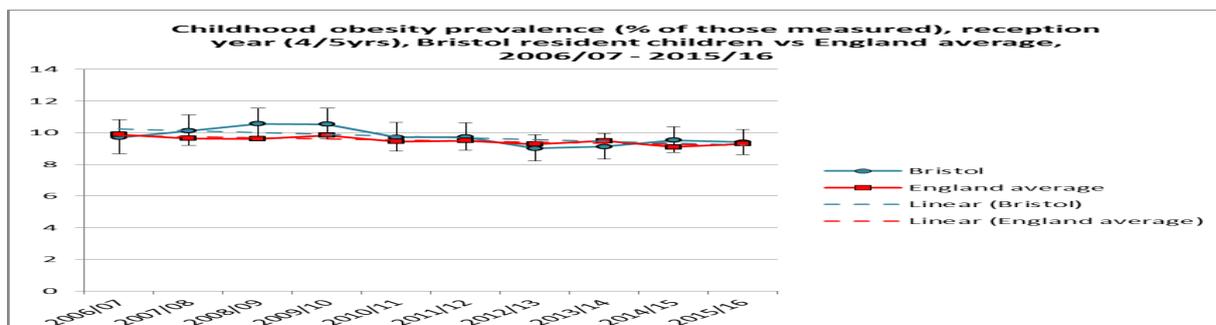
Figure 2 Childhood excess weight prevalence in Bristol by gender –Year 6 2015/16



2.2 Time Reception age children (4-5 years old)

The proportion of reception children with excess weight in England has been largely constant, around 22-23%, since NCMP began in 2006/07. The Bristol rate had been around 25%, higher than England, for 2007 to 2010, but since 2010/11 has been broadly similar to nationally. Bristol is 22.9% in 2015/16, similar to England, 22.1%. 2015/16 prevalence of obesity is 9.4% for this age group (England 9.3%)

Figure 3 Childhood obesity prevalence – Reception 2006/7-2015/16

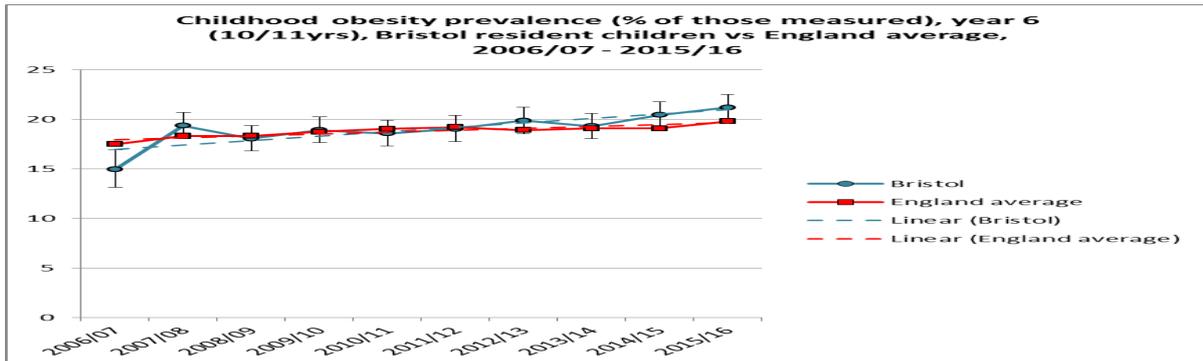


Time Year 6 age children (10-11 years old)

The proportion of 10-11 year old children overweight or obese in England has been largely constant, around 32-33% since the NCMP programme began in 2006/07. However, in Bristol the rate has been rising in recent years and in 2015/16 the proportion of 10-11 year olds who were obese or overweight was 35.4%. This is broadly similar to the national average of 34.2%. 2015/16 prevalence of obesity is 9.4%

21.2% for this age group (England 19.8%)

Figure 4 Childhood obesity prevalence –Year 6 2006/7 – 2015/16



The childhood obesity prevalence for year 6 children in Bristol is now significantly higher than the England average.

2.3 Place Reception age children (4-5 years old)

Within Bristol, the proportion of 4-5 yr. olds who are overweight or obese is much lower in North & West inner (Westbury on Trym, Stoke Bishop, Clifton, Clifton Down, Redland, Cotham and Bishopston and Ashley Down), (17%). and highest in North & West Outer (26%), (Lockleaze, Horfield, Southmead, Henbury and Brentry and Avonmouth and Lawrence Weston.)

By ward, the range is from 11% in Clifton Down to 30% in Filwood and 31% in Hartcliffe & Withywood (2012-15)¹. In some wards by the time they start school, almost 1 in 3 children have a weight likely to cause health problems later in life This illustrates the importance of promoting healthy eating and physical activity during early childhood.

Figure 5 Bristol Reception excess weight by ward 2013/4 to 2015/6

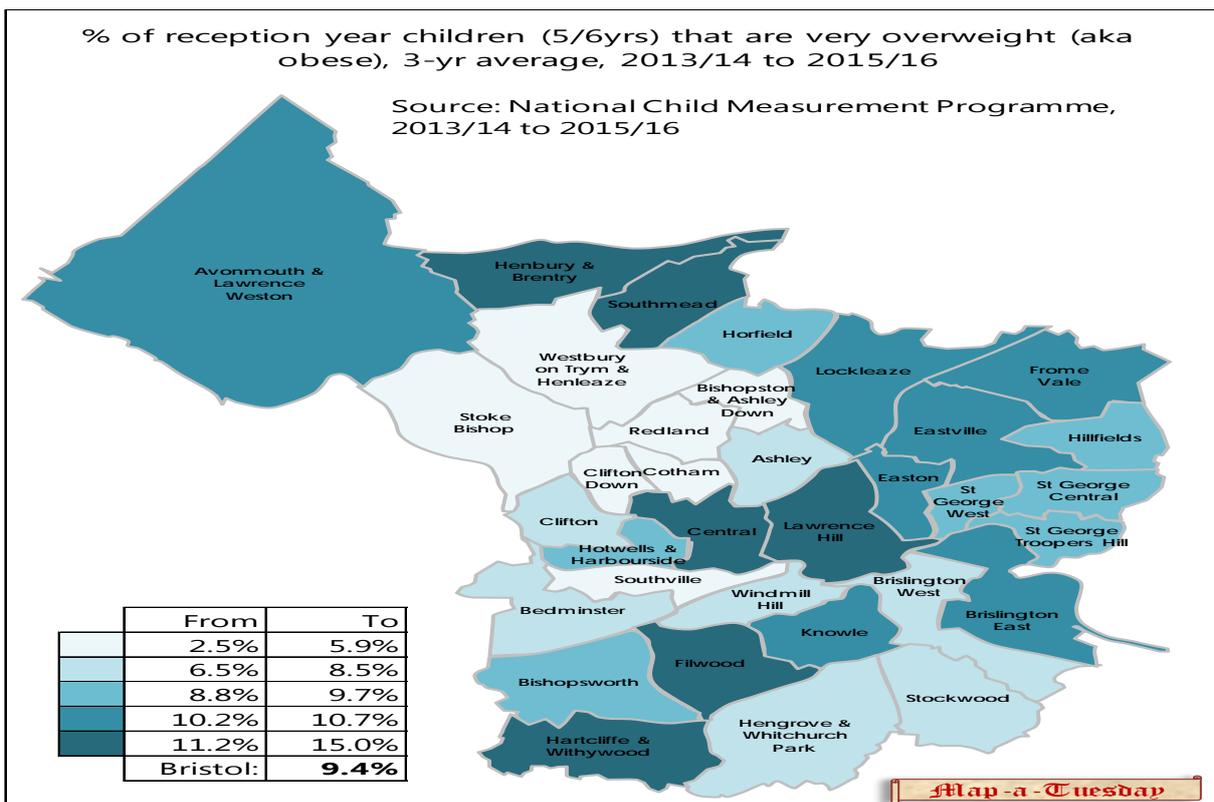


Figure 6 Prevalence of excess weight for Year 6 pupils 2010/11 to 2016/7

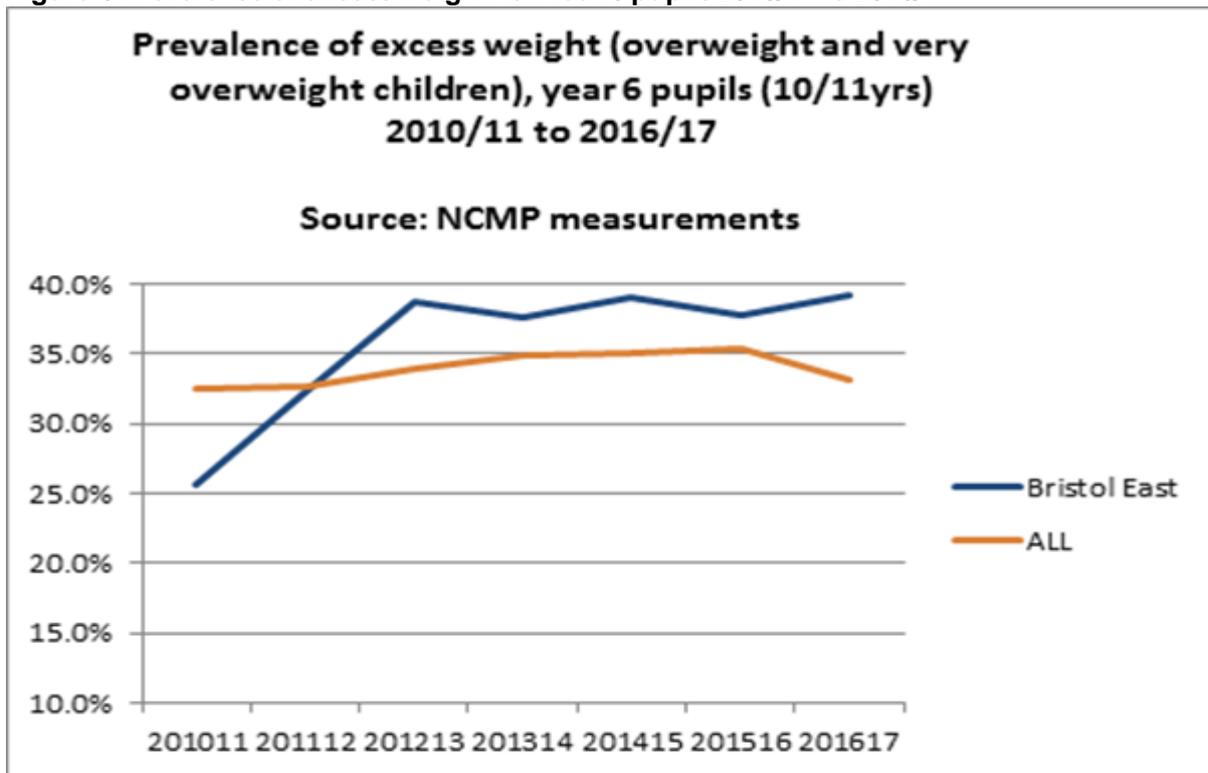
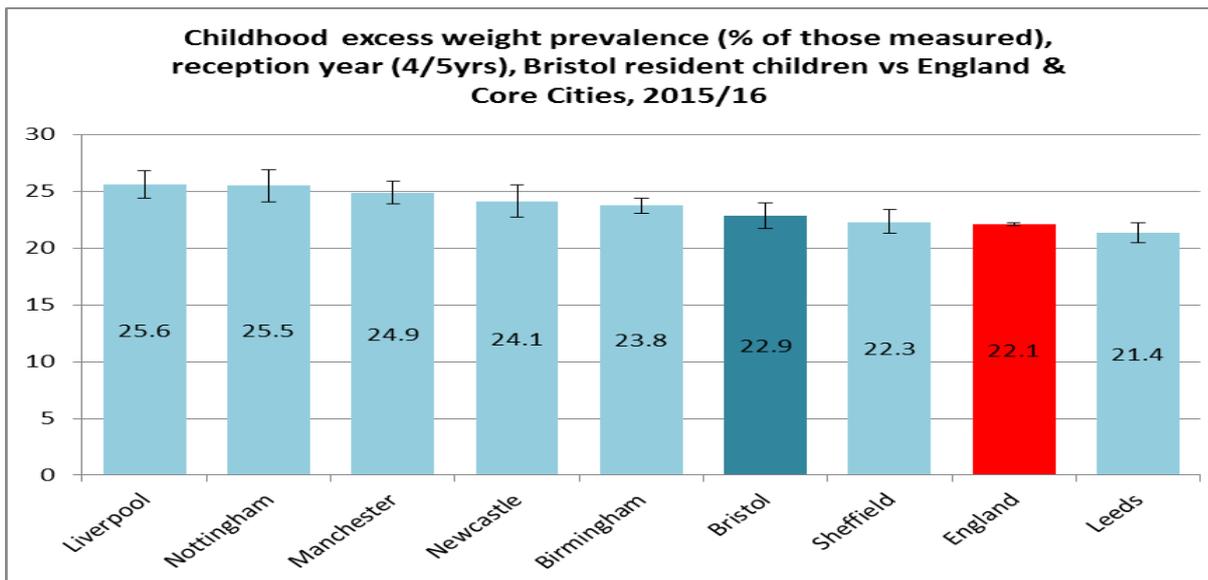


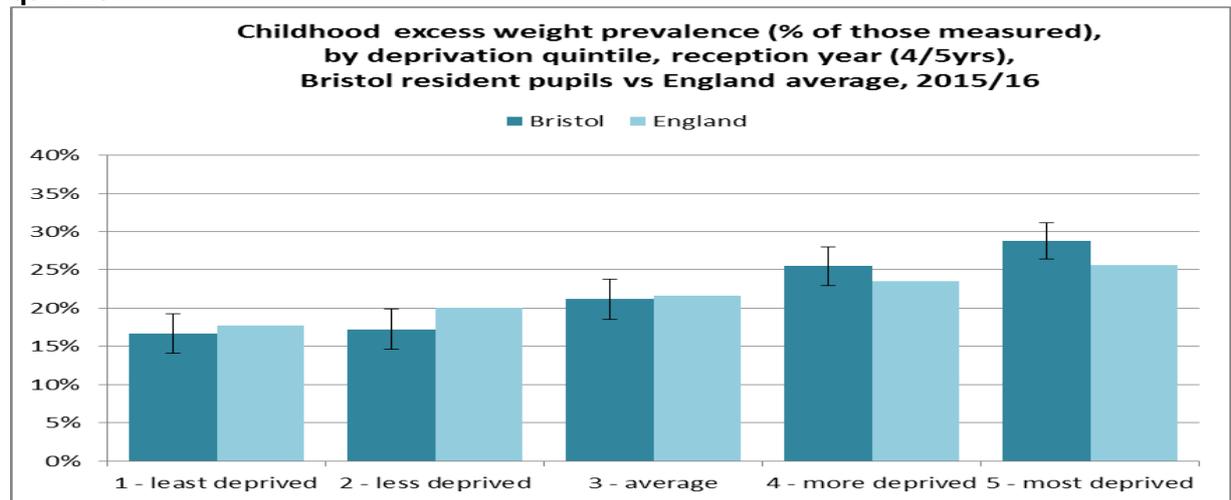
Figure 6 indicates the increase in children aged 10-11 years who are overweight and very overweight children in Bristol East.

Figure 7 Childhood excess weight prevalence –Bristol versus the core cities 2015/16



When compared to the core cities Bristol excess weight prevalence figures for reception year children in 2015/16 are still similar or statistically lower than others.

Figure 8 Bristol childhood excess weight prevalence in reception year children by deprivation quintile



The figure above demonstrates the clear links between obesity and deprivation with higher prevalence seen in quintile 5 in Bristol

Year 6 age children (10-11 years old)

Within Bristol, the proportion of 10-11yr olds overweight or obese has risen sharply in Bristol East in recent years. It is significantly lower in North & West (inner) (Westbury on Trym, Stoke Bishop, Clifton, Clifton Down, Redland, Cotham and Bishopston and Ashley Down), whilst all other areas have more than 1 in 3 children overweight or obese by the time they leave primary school. Please refer to Figure 5 for the CCG localities based on 2016 ward boundaries. By ward, the range is from 17% in Redland to 42% in Lawrence Hill and 44% in Hartcliffe & Withywood (2012-15)

Figure 9 Bristol year 6 excess weight by ward 2013/4 to 2015/6

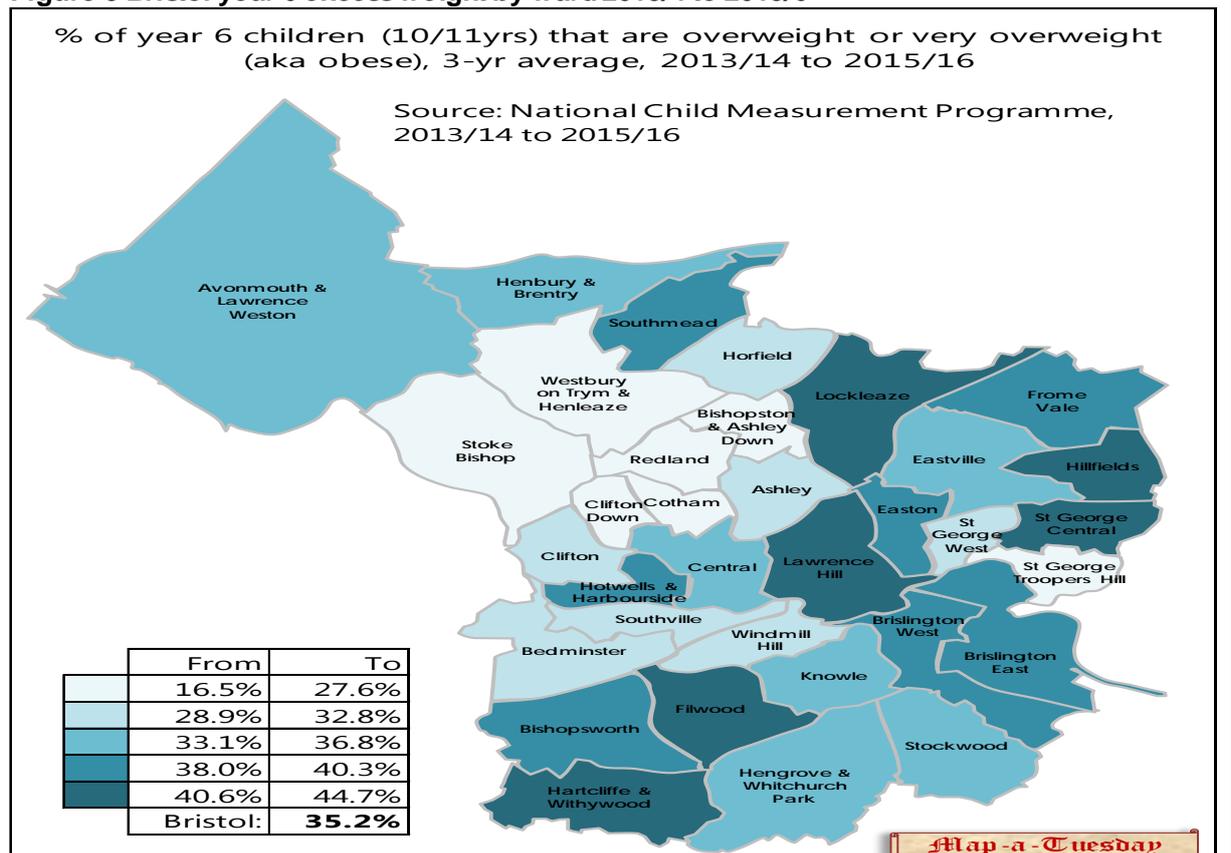
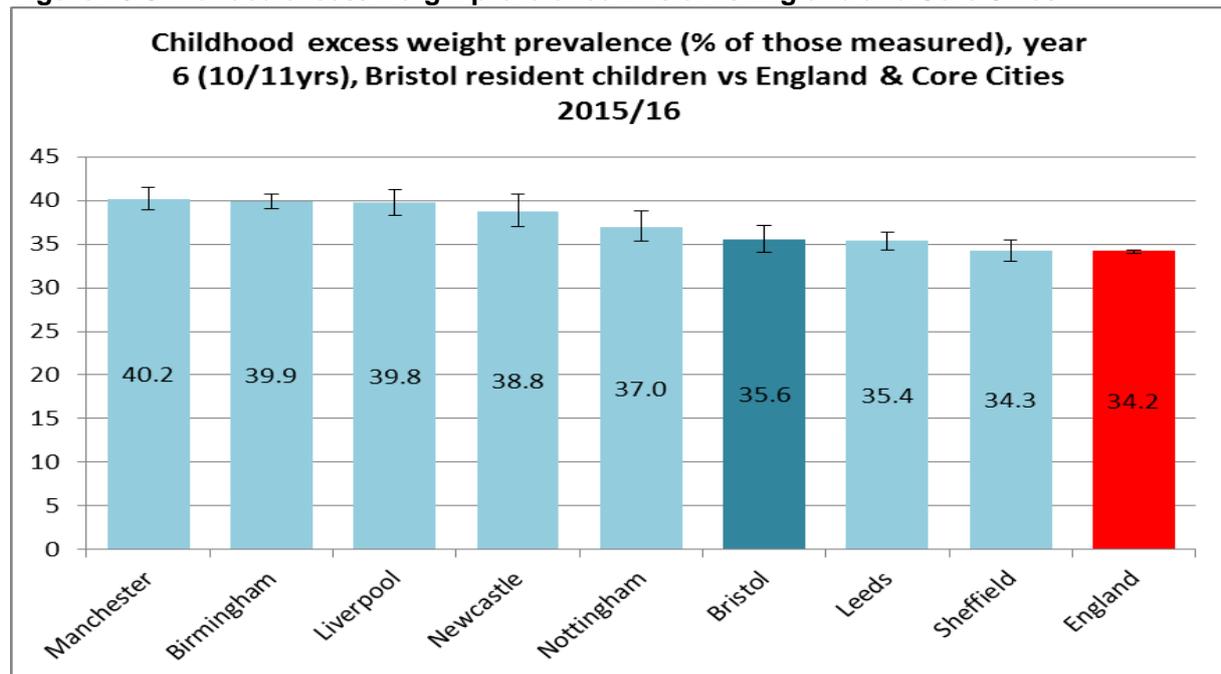
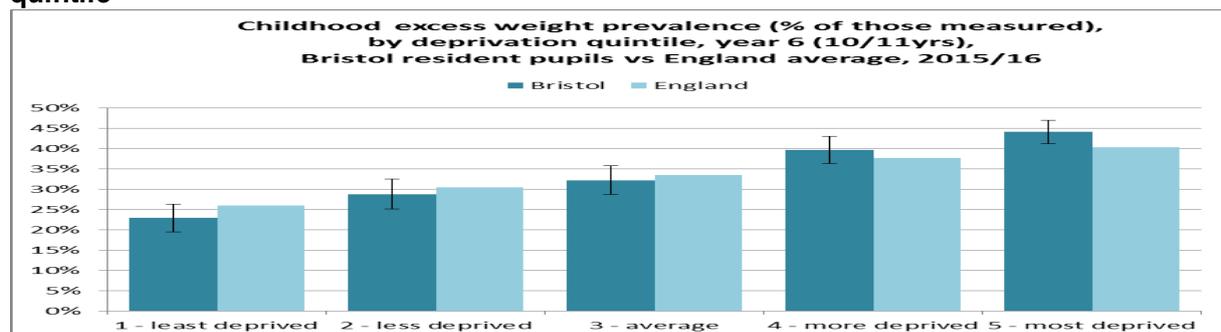


Figure 10 Childhood excess weight prevalence Bristol vs England and Core Cities



Compared to similar cities across England, the rates in Bristol are lower than five of the seven core Cities.

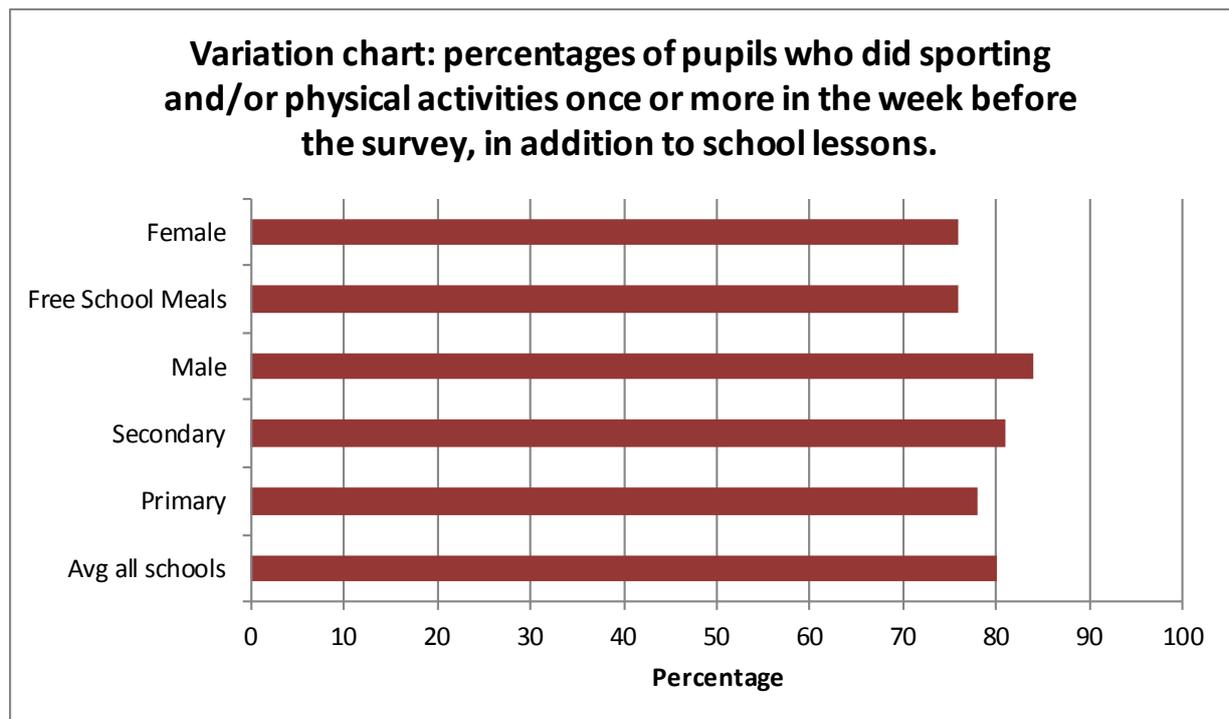
Figure 11 Bristol childhood excess weight prevalence in year 6 year children by deprivation quintile



The table above demonstrates the clear links between obesity and deprivation with higher prevalence seen in quintiles 4 and 5 in Bristol

2.4 Modifiable Risk Factors The Bristol Director of Public Health Report 2016 stated that 83% of 15 year olds do not meet the activity recommendations in Bristol. Table 11 shows the Bristol Pupil voice data 2015 found variations of the groups of young people who reported undertaking activity. Bristol schools have the opportunity to complete the Pupil Voice survey. Children are surveyed on a range of healthy lifestyle issues at year 4 and year 6. This survey is replicated bi-annually and allows schools to identify areas to prioritise and a comparison with the England average.

Figure 12 Overview of Bristol Children Reporting Undertaking Physical Activity -Data is from the 2015/16 Pupil Voice Survey



All the results on Figure 11 are significant when comparing against the average response from schools across England.

The 2015 Bristol pupil voice report also indicated some of the reported barriers to physical activity, 45% of secondary students reported lack of time as a barrier, this is higher than sample reference levels which were 34%, in addition 18% saw cost as a barrier and a further 8% of boys and 21% of girls reporting being shy of how they look.

2.3.1 Sedentary Behaviour

Figure 13 Bristol Pupil Voice Data 2015 -Reported screen time

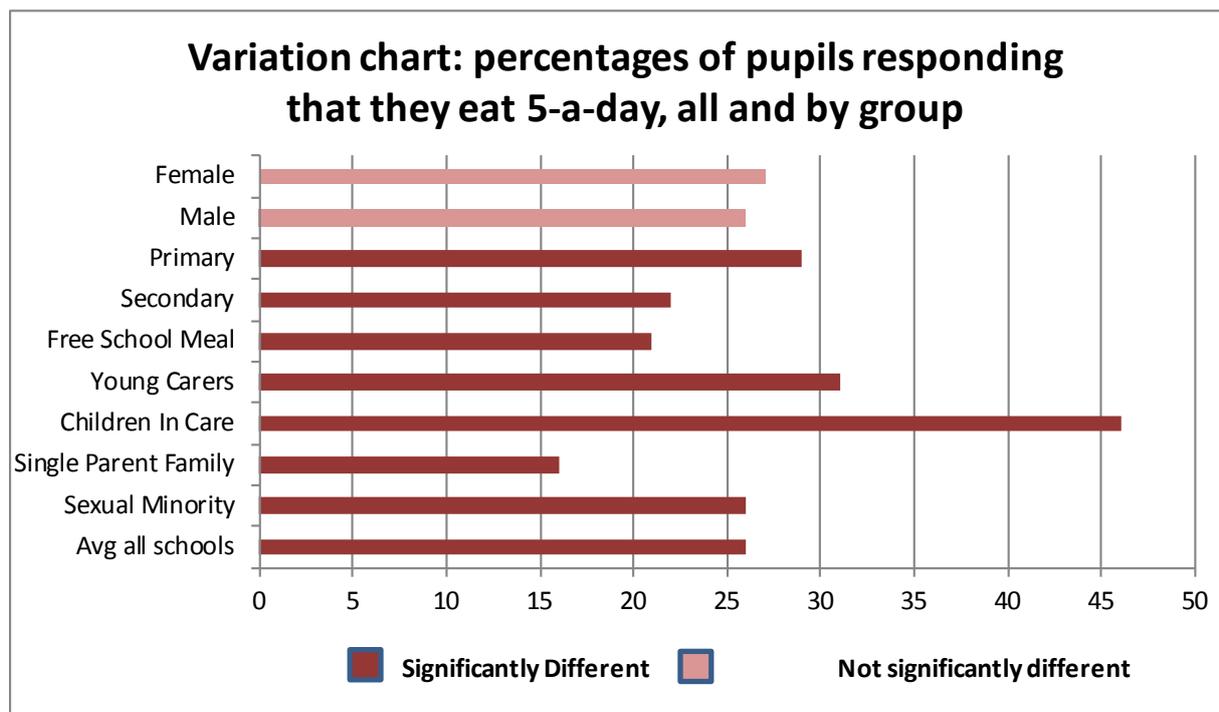
| Screen Time | Primary boys | Primary girls | Secondary girls | Secondary boys |
|---|--------------|---------------|-----------------|----------------|
| Reported screen time – < 1 hour per day | 20% | 28% | 7% | 9% |
| Reported screen time 3 hours + per day | 30% | 18% | 20% | 18% |

24% of the primary children and young people surveyed reported looking at a screen for 3 hours of more the day before the survey.

Please note that Childrens informal physical activity and play opportunities will be covered in the Healthy Place JSNA Chapter

2.3.2 Dietary Factors The WAY survey 2014 reported that 47% of 15 year olds are currently not meeting the 5 A DAY recommendation. In addition the Bristol Pupil Voice data 2015 highlights that 29% of primary pupils and 22% secondary pupils report eating 5 A DAY. This equates to ~ 25% overall with 10% reporting eating none.

Figure 14 Bristol Pupil Voice 2015 Data -Children and young people reporting eating 5 A DAY



Variations again are seen in reported 5 A DAY between various groups of young people. The differences highlighted as significant are as compared to results from schools across England.

Figure 15 Bristol Pupil Voice 2015 Data -Primary school children reporting food choices

| Food and drink reported eaten daily or on most days | Primary boys | Primary girls | Secondary boys | Secondary girls |
|---|------------------------------|------------------------------|----------------|------------------------------|
| Eat fruit daily | 53% | 58% | 35% | 46% |
| Eat veg daily | 46% | 51% | 43% | 53% |
| Crisps | 24% | 23% | 27% | 23% |
| Sweets chocolate and chocolate bars | 25% | 24% | 24% | 26^ |
| Other- Fizzy drinks | Not in top 10 reported foods | Not in top 10 reported foods | 17% | Not in top 10 reported foods |

This data again compounds the fact that many children are not choosing to eat fruit and vegetables on most days. Sweets and chocolates are reported as being consumed by about 25 % young people most days.

2.3.3 Breakfast The Bristol pupil voice survey indicated that 6% of primary and 15% of secondary students skip breakfast, the secondary data is higher than the England average which is 10%

2.3.4 School Meal Uptake With limited national data on school meals uptake, the Childrens Food Trust in the State of the Nation Report 2016 collated data from various sources including the school census and the last school meal survey in 2012 and estimated 5.4m school age children in the UK have school meals. The rest – estimated 4.8m children –go home for lunch, bring a lunchbox or eat off-site. The same report also stated that Chocolate biscuits, cereal bars, crisps and sugary drinks continue to be staples of children’s lunchboxes in the UK,

2014/2015 Bristol School Meal Uptake

Primary school meal uptake From April 2014 to March 2015 the uptake figure is 50.1%

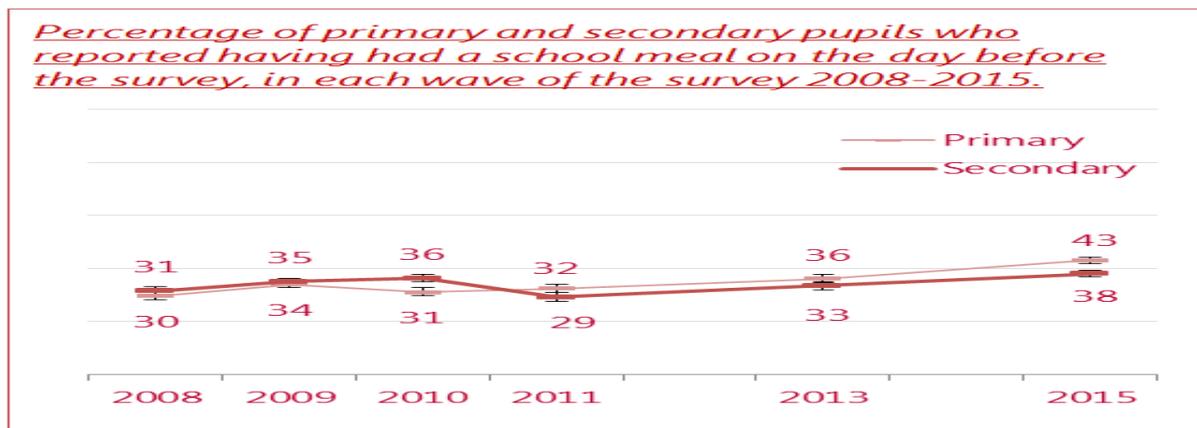
Secondary school meal uptake From April 2014 to March 2015 the uptake figure is 36.6%

2015/2016 School Meal Uptake

Primary School meal uptake from 31st March 2016 = 50.7%. (Up 0.6%)

Secondary School meal uptake from 31st March 2016 = 37%. (Up 0.4%)

Figure 16 Bristol Pupil Voice Report 2015 -Primary School Children reporting eating school meals



2015 Reported 5 A DAY Uptake of children choosing a school meal mirrors the Bristol school meal data

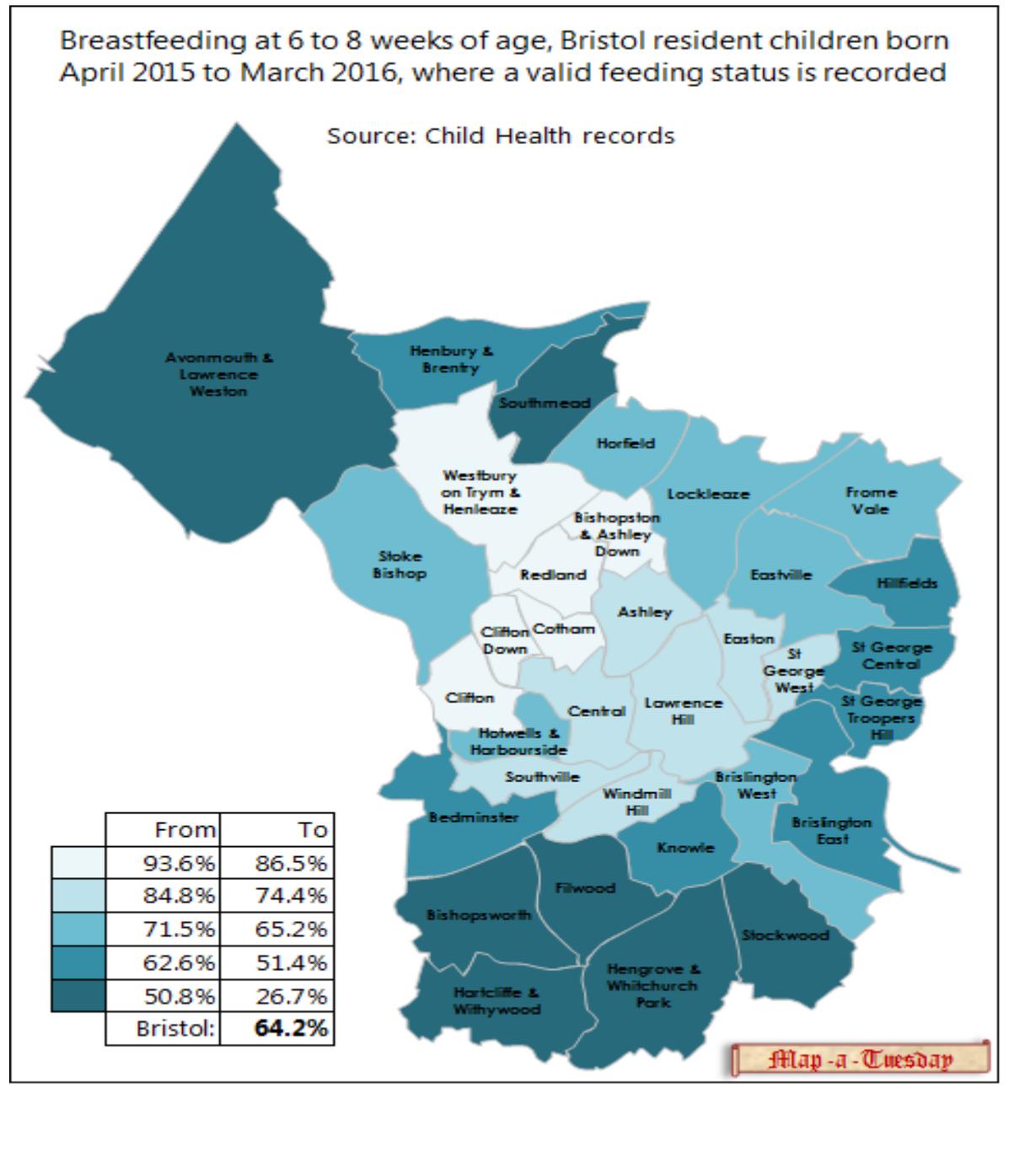
2.3.5 Fast Food, Takeaways and Hot Food Takeaways the current Bristol policy states that hot food takeaways should not be given planning permission for within a radius of 400 metres of where there are young people. National mapping indicates that Bristol has high levels of hot food takeaway, compared to the national average. During the Local Plan review, a health impact assessment of increasing the radius to 800 metres will be submitted. It should be noted that mapping takeaways, deprivation and obesity will not expect to show a clear correlation as the causes of deprivation and obesity are multi-factorial

Please note for more information that there is a separate JSNA Chapter addressing Sustainable food

2.3.6 Breast Feeding In Bristol rates for breastfeeding 2015 to 2016 for where there is a valid feeding status is recorded are lowest in the most deprived wards. 2015/16 Bristol data indicated that at 6-8 weeks 86.8% of mothers records indicating a valid feeding status.

Figure 17 overleaf indicates highest rates of breast feeding at 6 to 8 weeks of age are in the Clifton, Redland, Cotham, Westbury on Trym and Bishopston areas. Please note there is a JSNA Chapter specifically focusing on Breastfeeding

Figure 17 Bristol breastfeeding rates at 6 to 8 weeks of age 2015-2016 where a valid feeding status is recorded.



3) What are the relevant national outcome frameworks indicators and how do we perform?

Public Health Outcomes Framework

Excess Weight in 4-5 year olds

PHOF Child excess weight in 4-5 year olds indicates an England average of 21.9% at reception. Bristol data is similar at 23%

Excess Weight in 10-11 year olds

PHOF Child excess weight in 10-11 year olds indicates an England average of 33.2% at Year 6. Bristol data is significantly higher at 35%

Breast Feeding

PHOF Breast feeding initiation data indicates an England average of 74.3%. Bristol data is ahead with 82.2% breast feeding initiation.

PHOF Breast feeding at 6-8 weeks indicates that the England average is 43.2% with Bristol exceeding this with breast feeding at 6-8 weeks at 63.7% (Bristol data is using recorded known feeding status)

Breastfeeding is also highlighted within the NHS Outcomes Framework

4) What is the evidence of what works (including cost effectiveness)?

To prevent and reduce excess weight requires a sustained reduction in energy / calorie intake with an increase in activity. Interventions should start early in life as this is when parental control and eating and activity patterns and preferences are being established (NICE 2006).

Figure 18 The following NICE guidance documents have recommendations relevant to the prevention and treatment of childhood obesity:

| Guidance reference | NICE Guidance | Date |
|--------------------|---|-----------------------------|
| PH42 | Obesity: working with local communities | 2012 Revised November 2016 |
| NG7 | Preventing excess weight gain (NG7) | March 2015 |
| CG189 | Obesity: identification, assessment and management | 2014 |
| PH17 | Promoting physical activity. | 2009 |
| PH47 | Managing overweight and obesity among children and young people: lifestyle weight management services | 2013 |
| CG43 QS94 | Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children | Dec 2006 updated March 2015 |
| | Obesity in children and young people: prevention and lifestyle weight management programmes | 2015 |

By undertaking an audit on NICE PH47 'Managing overweight and obesity among children and young people, lifestyle weight management services', successful elements of services in Bristol together with gaps to focus on as priorities were identified as seen in Figure 19.

Figure 19 Nice Audit of PH47 for Bristol 2017

| NICE Guidance Recommendations | Recommendations partially or not met in Bristol | Plan of Action |
|---|--|---|
| Consider how best to offer services to children and young people with disabilities | Limited | Identified as recommendation for action |
| Ensure all lifestyle programmes are designed with input from an MDT and includes views of children and young people | Partially | Identified as recommendation to continue and action |
| Ensure all programmes are regularly updated by an MDT | Partially | Continue |
| Positive parenting skills training to support problem solving and changing behaviours | Partially ANK work with the whole family including parents and carers as part of the group programme The CCHP Healthy Weight pathway includes parenting support. | Identified as recommendation for action |
| Ensure there are staff available who can provide training on parenting skills | None The CCHP Healthy Weight pathway includes parenting support | Identified as recommendation for action |
| Identify gaps in staff knowledge | Partially | Identified as recommendation for action |
| Tell participants about local services and activities that may further support them manage weight. | Partially Providers have commented that they would benefit from a way of knowing all community activities so they can promote | Identified as recommendation for action |

Bristol meets and exceeds the majority of areas as recommended in NICE guidance including meeting recommended core components of Lifestyle and weight management programmes, developing a tailored plan to meet individual needs and encouraging adherence to lifestyle weight management programmes.

Bristol is also ensuring a continued family based, multi component lifestyle weight management programme as part of a community wide approach, using community engagement to identify any barriers and facilitators to uptake of local programmes and ensuring all lifestyle programmes for CYP are multi component and include: diet, physical activity, reducing sedentary time and strategies to change CYP and family behaviours within the new integrated lifestyle commission.

Waters et al, 2009 as part of a Cochrane review indicated that using combined behavioural lifestyle interventions compared to standard care or self-help can produce significant and a clinically meaningful reduction in overweight children and adolescents.

In addition Waters et al 2011 stated that childhood obesity prevention research must now move towards identifying how effective intervention components can be embedded within health, education and care systems and achieve long term sustainable impacts.

To conclude there is good evidence that interventions which provide healthy lifestyle support rather

than an emphasis on weight change and in addition programmes that offer support and advice on physical activity and diet together are more likely to be effective for weight outcomes than single-component approaches

- The European Youth Tackling Obesity report stated that young people identified internal, emotional factors such as the main barrier to making healthy lifestyle choices. Messages about such issues should focus on how young people feel about themselves and their lives. The key findings from their social marketing campaign to tackle obesity showed: Youth-led and peer to peer approach gave young people greater control to provide reliable, relevant, positive, inspirational and accessible information.
- Young volunteers developed skills, knowledge and confidence so that they were better prepared to make decisions and take the lead.
- Raised awareness of obesity and increased motivation for healthy eating and undertaking physical activities. 89.9% of survey respondents rated campaigns as somewhat or very effective in encouraging them to live a healthier life.

Local evidence

ANK

Table 20 Summary of ANK outcomes at the end of the programme (12 weeks) in Bristol

| Outcomes | Year 1 | Year 2 | Year 3 | Year 4 |
|---|--------|--------|--------|--------|
| Completers | 194 | 256 | 218 | 225 |
| % of children reduced BMIz score* | 73% | 70% | 80% | 75% |
| % completers increasing their daily Fruit & Vegetable consumption | 69% | 68% | 65% | 85% |
| % of children increasing their self-esteem score only with children 7 years and above | 66% | 69% | 69% | 90% |
| % of children decreasing their sedentary behaviour | 12% | 22% | 22% | 57% |
| % of children achieving at least 60 minutes a day | 60% | 65% | 56% | 64% |

*includes 1:1 and SEN programmes

This indicates that by year 4 when ANK was established in Bristol all results had increased. This can be attributed to the programme now being well known, accepted and embedded within Bristol.

Figure 21 Summary of ANK outcomes at the end of the programme (6 Months follow up) in Bristol

| 6 Month follow ups | Year 1 | Year 2 | Year 3 | Year 4 |
|---|---------------|---------------|---------------|---------------|
| Number of children attended 6 month follow up | 190 | 229 | 232 | 294 |
| % of children attended 6 month follow up | 67% | 66% | 57% | 45% |
| % of children reduced BMIz score (from week 1) | 67% | 67% | 65% | 74% |
| % completers increasing fruit & vegetable consumption | 54% | 55% | 55% | 72% |
| % of completers increasing self-esteem score | 61% | 64% | 65% | 45% |
| % of completers decreasing sedentary behaviour | 22% | 20% | 19% | 17% |
| % of completers achieving 60 minutes of physical activity a day | 60% | 57% | 60% | 67% |

Figure 21 indicates results at 6 months follow up to be stable from year 2 to year 3.

Figure 22 Summary of ANK outcomes at the end of the programme (12 Months follow up) in Bristol

| 12 Month Follow ups | Year 1 | Year 2 | Year 3 | Year 4 |
|---|---------------|---------------|---------------|---------------|
| Number of children attended 12 month follow up | 70 | 90 | 100 | 132 |
| % of children attended 12 month follow up | 35% | 38% | 36% | 20% |
| % of children reduced BMIz score (from week 1) | 64% | 64% | 67% | 63% |
| % completers increasing fruit & vegetable consumption | 51% | 52% | 50% | 50% |
| % of completers increasing self-esteem score | 60% | 62% | 60% | 78% |
| % of completers decreasing sedentary behaviour | 17% | 16% | 21% | 40% |
| % of completers achieving 60 minutes of physical activity | 63% | 56% | 58% | 70% |

% completers at 12 months reporting decreasing sedentary behaviour had improved by year 3, other results remain stable

Healthy Weight Nurses

Figure 23 Referrals to the Healthy Weight Nurse service 2015/16

| Numbers of referrals to the Healthy Weight Nurses | Numbers of referrals to the Healthy Weight Nurses who had a Learning Disability | Number of contacts | DNAs |
|---|---|--------------------|------|
| 182 | 58 | 664 | 72 |

Figure 24 Healthy Weight Nurse Outcomes 2015/16 Changes in BMI between 1-6, 6-12 and 1-12 month review meetings

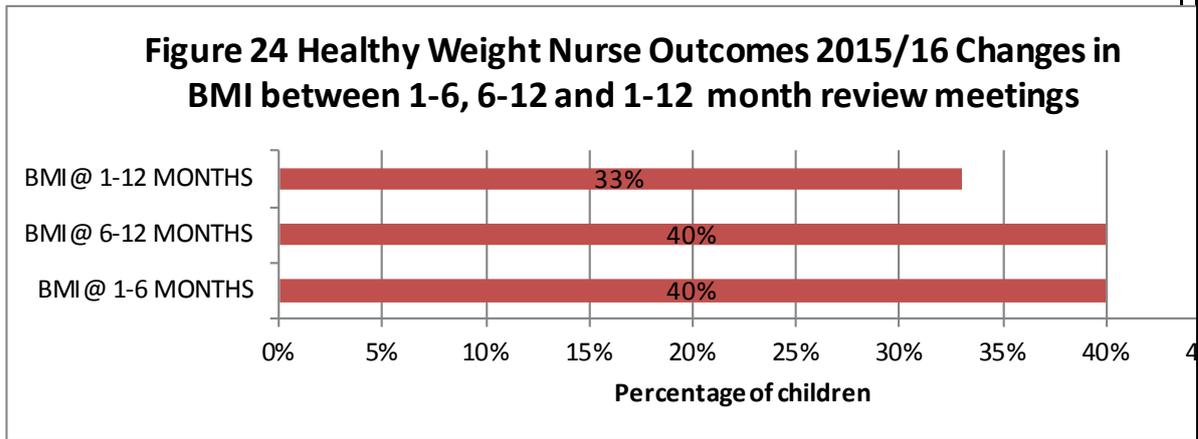
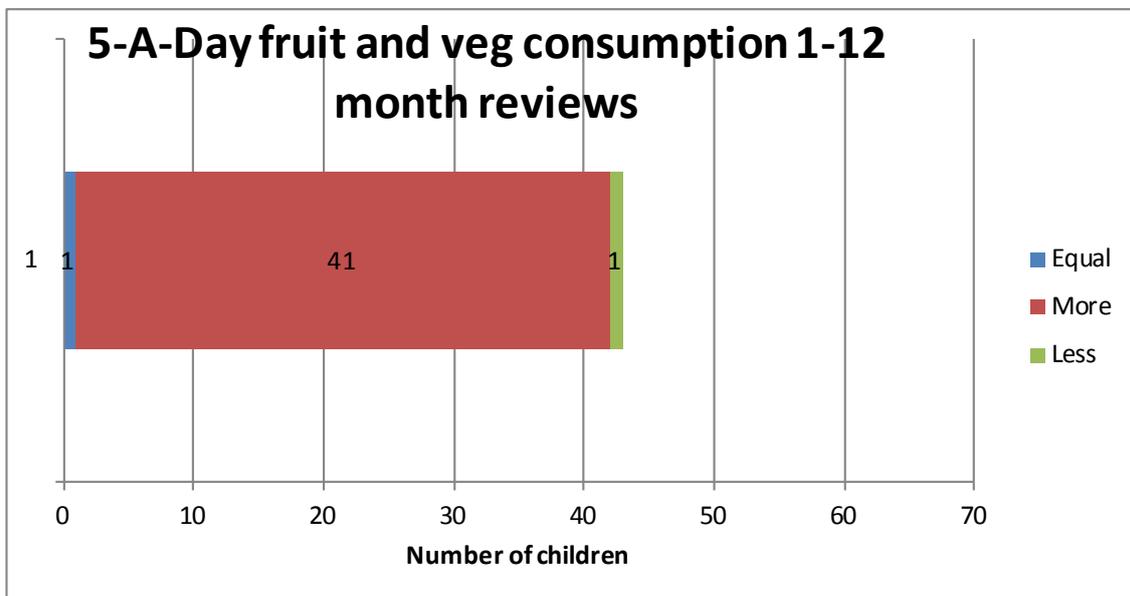


Figure 25 Healthy Weight Nurses promoting 5 A DAY Summary of success to date



The Healthy Weight nurses see an increase in children and young people accessing the service reporting eating 5 A DAY post intervention

5) What services / assets do we have to prevent and meet this need?

Local Strategy and Guidance

Bristol is a very dynamic City with lots on interventions being offered. At a strategic level guidance includes:

Bristol Healthy Weight Strategy 2017

The Healthy Weight strategy is one of the three priorities of the Health and Wellbeing Board. The strategy is currently in draft form. The strategy launch took place on May 23rd 2017. Governance is via the Great Weight Group <https://www.bristol.gov.uk/social-care-health/get-involved-in-the-great-weight-debate>

Work streams from the strategy include Sugar Smart Bristol which is a high profile 2 year campaign launched in 2017 <https://www.bristol.gov.uk/web/live-well-bristol/sugar-smart>
Sugar Smart Bristol launched 2017

Bristol Active City of Sport

Bristol has been awarded the prestigious title of European City of Sport 2017. This was in recognition of:

- Great sports facilities
- Current physical activity levels
- Success of local sports clubs and sporting events
- How Bristol works together to provide high quality

Bristol Child Healthy Weight Pathway

There is also a Bristol Child Healthy Weight Pathway this care pathway outlines the services available for children and their families for weight management in Bristol, to help health professionals, families, and children choose the most appropriate service for their individual needs

<http://cchp.nhs.uk/sites/default/files/attachments/Bristol%20Care%20Pathway%20For%20Child%20Weight%20Management.pdf>

Interventions active and offered in Bristol

Figure 26 Surveillance interventions in Bristol

| Surveillance interventions | Brief outline | Outcome |
|----------------------------|--|---|
| NCMP | <p>Number of Schools participating 104 104 schools are included in the BCC-commissioned local NCMP exercise, which represents:</p> <p>96% of Bristol state primary schools (108)</p> <p>85% of Bristol state and independent primary schools (122)</p> <p>80% of all primary schools in Bristol, including mainstream state provision, special provision and independent schools (130)</p> | <p>2015/6</p> <p>5,131 reception year children measured 94.9% coverage 3,809 year 6 children measured 90.8% coverage.</p> |

Figure 27 Prevention Interventions

| Intervention | Brief outline | Outcome |
|---------------------------------|--|--|
| Unicef Baby friendly initiative | <p>The Baby Friendly Initiative was set up in 1995 by the WHO and UNICEF to protect, support and promote breastfeeding as a central plank of the Global Strategy on Child Health. The Baby Friendly accreditation is based on evidence-based standards.</p> <p>https://www.unicef.org.uk/babyfriendly/</p> | <p>Bristol Bristol became a 'Baby Friendly' city in 2010 and all services have gained accreditation; Southmead Hospital & NICU 2005 re-assessed 2016 St Michaels' Hospital & NICU 2009 Health Visiting service and Children's Centres 2010 re-assessed 2012 Progress towards achieving the new standards has taken place over the past four years.</p> |
| Bristol Standard for Health | <p>The Bristol Standard is a self-evaluation framework which helps Early Years settings, Childminders and Play settings to develop and improve the quality and effectiveness of their provision through an annual cycle of reflection. The Health Priorities were developed in response to the findings from two major pieces of research: The Marmot review highlighted the importance of promoting healthy lifestyles as early as possible. Recent research shows that the first 1000 days are the most important – this is from conception to the second birthday In view of the many health issues that need to be covered and reflected on the Bristol Standard team has developed the Bristol Standard for Health to pilot. This will allow settings to reflect more deeply on ten public health issues that are important to their particular setting</p> <p>https://www.bristol.gov.uk/resources-professionals/bristol-standard https://www.bristolearlyyears.org.uk/</p> | <p><u>Settings engaged</u> Child minders 40 Childrens Centres 10 Private / voluntary and independent nurseries 95 Schools 40 Play settings 12 Total Bristol settings engaged 197</p> |
| Healthy Start Programme | <p>The Healthy Start scheme is designed to help low-income pregnant women and families with children under four buy liquid cow's milk, plain fresh and frozen fruit and vegetables and infant formula milk and vitamins.</p> <p>https://www.healthystart.nhs.uk/</p> | <p>We don't have data on the numbers of eligible families accessing this scheme. It is a means tested benefit so the data is collected by the Department of Work and Pensions.</p> |

| | | |
|--|---|--|
| Healthy Child Programme | <p>The Healthy Child Programme (Department of Health, 2009) sets out the schedule for services covering care from 28 weeks of pregnancy through to age 5. This is delivered as a universal for all service with additional services for families needing extra support, whether this is a short-term intervention or ongoing help for complex longer-term problems. This is provided by health visitors and Childrens centres deliver the community elements. The programme can ensure families receive early help and support upstream before problems develop further and reduce demand on downstream, higher cost specialist services</p> <p>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/167998/Health_Child_Programme.pdf</p> <p>Healthy weight is one of six high impact areas highlighted in the programme where Health Visitors can have the most impact on children's health and wellbeing.</p> | All families should have five health and development reviews, these are a key feature of the Healthy Child Programme. They take place at 28 weeks of pregnancy, within 14 days of birth, 6 to 8 weeks of age, at 9 to 12 months and at 2 to 2.5 years. There is opportunity at each of these contacts to discuss healthy weight. |
| Fast Food Outlets near schools | Planning regulation of no fast food outlets within 400m of a school | Scrutiny are considering increasing the regulation to 800m |
| Bristol Healthy Schools – Mayor's Award | <p>Bristol Healthy Schools –The core offer includes increased support for schools sited in quintiles 4 and 5. The approach taken includes; developing policy and practice in healthy eating, physical activity, Personal, Social Health and Economic and emotional health and wellbeing. www.bristolhealthyschools.org.uk/ 2017 sees the launch of a refreshed Healthy School Programme developed with consultation from local schools. The new format allows schools to work to achieve badges in eight areas: food and nutrition, dental health, mental health and wellbeing, physical activity, substance misuse, Bristol ideal, PSHE and Health protection.</p> | <p>23 schools currently hold the Mayors Award</p> <p>21 schools are working towards the full award</p> <p>Of the 23 schools with the Mayor's Award 15 acknowledged high obesity rates in the school via NCMP and ward data.</p> |
| Bristol Healthy Schools – School Standards | The standards award is composed of criteria relating to the school setting, PSHE, food and nutrition, physical activity and emotional health and wellbeing. | 5 schools currently hold the standards ward |
| Bristol Healthy Schools – Healthy Outcomes Award | The outcomes award requires schools to review the school population and identify health priorities and work to achieve behaviour change in schools. | 1 school currently holds the outcomes award |
| Sugar Smart School Pledges | <p>In January 2017 Bristol became a Sugar Smart City. Sugar Smart Bristol Schools criteria have been developed and schools are pledging to be Sugar Smart.</p> <p>https://www.bristol.gov.uk/web/live-well-bristol/sugar-smart</p> | 12 schools have pledged to be a Sugar Smart School within one week of the criteria being launched. |

| | | |
|---|---|--|
| Bristol Healthy Schools School Food Training | Nutrition Theme days have been offered for all school staff since 2006 The training includes updates of government guidance / policy regarding school food. | ~90% of Bristol School have attended at least one training day All awarded schools have to attend every three years |
| Breakfast Clubs | Bristol Healthy Schools standards promotes the benefits of Breakfast clubs and encourages school breakfast clubs and use if community breakfast clubs | The New Healthy Schools Food and Nutrition Badge is launched December 2017 |
| School holiday Clubs offering food and activity | In 2017 the Bristol Sports and physical activity team have supported the Fit & Fed project that aims to tackle the holiday hunger crisis for children and young people in the most deprived wards of Bristol. Fit and Fed combined free physical activity and food for children during school holidays. Sessions were based in the most deprived wards, where the number of children receiving free school meals is high. Healthy food and quality activity provision in school holidays are provided for a minimum of 4 hours. | Bristol is now at the stage where we have a workable model to take forward. Talks are ongoing with feed Britain; make lunch, fareshare, fresh range and many councillors across the council to look at how this can be rolled out further. |
| C4L Change for life National Public Health Campaign | All Bristol Schools are encouraged to link and promote c4l campaigns and resources. https://www.nhs.uk/change4life-beta/be-food-smart | In February 2017 Bristol was chosen as a location to a launch the C4L Food App and showcased a Bristol family case story. |
| Mode Shift Stars – School Travel Plan | Modeshift STARS is the national schools awards scheme established to recognise schools that have demonstrated excellence in supporting cycling, walking and sustainable travel. https://modeshiftstars.org | 39 schools are signed up to Mode Shift Stars 37 are Primary Schools 2 Schools include children 2-18years |
| Living Streets pilot projects to get schools walking | Living Streets aim to get everyone walking. They offer expert advice to schools and the school community to help shape great neighbourhoods and influence travel behaviour. https://www.livingstreets.org.uk | 43 (including 5 Secondary) schools are signed up to the Living Streets pilot projects |
| Bristol Healthy Schools Young Chef / Baker and Gardener | A City wide competition promoted via schools and the whole school community. www.bristolhealthyschools.org.uk/.../bristol-healthy-schools-young-baker-young-chef | Last time the awards were launched hundreds of applications were received from primary, secondary and special schools. |
| Bikeability | Bikeability includes bikes with 3 and 4 wheels for people with less confidence, a bike loan and exchange scheme. | 3719 attendances to |

| | | |
|-----------------------|--|---|
| | https://bikeability.org.uk/ | ride 2016-2017 April 2017 alone 1121 attendances |
| Wheels to Work Scheme | The Wheels to Work bike scheme gives £50 off a recycled bike through the Bristol Bike Project / Lifecycle UK or free 2 month loan of a bike from Bristol Bike Project. https://travelwest.info/communities/wheels-work-bike-loan-supports-access-work-bristol | |
| Parks and Playgrounds | Bristol City Council Parks team have a programme of maintenance for all parks and the 158 playgrounds in Bristol | The Green Space Strategy for Bristol has an aim of ensuring that no child is more than 480m from a playground |

Figure 28 Training for raising the issue and brief interventions offered across Bristol

| Intervention | Brief outline | Outcomes |
|--|---|--|
| MECC – Making every contact count | Making Every Contact Count utilises the millions of day to day interactions that organisations and individuals have with other people to support them in making positive changes to their physical and mental health and wellbeing. | MECC enables the opportunistic delivery of consistent and concise healthy lifestyle information and enables individuals to engage in conversations about their health at scale across organisations and populations. |
| Raise the Issue' of weight & obesity (Brief Intervention Training) in order to support people to achieve and maintain healthy weight This training is offered across Bristol | ANK the tier 2 provider for children and young people offered this training across the City. www.ank.uk.com/ Special sessions were offered in school settings and an online version of the training created. Healthy Weight Nurses offered training for school nurses and school nurse assistants http://cchp.nhs.uk/cchp/explore-cchp/healthy-weight-nurses | ANK In 2016 -9 Training programmes were offered 114 Staff were trained Online sessions also offered Staff attending included teachers, public health staff, and school staff Training programmes were offered 2013/14 School nurses training – 2 sessions (for new staff only) - 22 staff Health visitors training- 16 training sessions- 137 staff (all Health Visitors including community nursery nurses) and 17 student HV's No training offered 2015/6 due to staffing but to restart 2017 |

The Role of the GP in healthy weight for children and young people.

Bristol has highlighted that raising awareness and engaging health professionals to the issue of healthy weight support is needed. ANK have placed emphasis on increasing referrals from GPs and the Healthy Weight nurses have added this as a priority to their workload, this will include training and support for GPs and practice based staff as well as ensuring consistent quality throughout the school nurse and health visitor teams. There is also scope to review the role of the GP within promoting and supporting the NCMP and raising the issue of and signposting children and families to support in the case of childhood obesity.

Treatment interventions offered in Bristol

There are two children's tier 2 weight management services:

- Alive N Kicking
- Healthy Weight Nurses

ANK The Alive N Kicking programme <http://www.ank.uk.com/ank-12> is provided by The Weight Management Centre and offers both 1-1 and group programmes. The programmes can be accessed by any young person aged 2-16 years. The programme is commissioned to accept referrals for 215 children and young people from across Bristol annually, the provider has exceeded this with in excess of 240 referrals. This programme is currently commissioned until March 2018, recommissioning for an all age behaviour change programme is underway.

Outcomes have been split into age ranges; both quantitative and qualitative data is collected.

The early years' data indicated uptake was not good and so alternative provision for this age group is being developed and piloted. The pilot aims to emphasis healthy lifestyle messages and to signpost Early Years –Pilot of a new tier two programme. From April 2017 ANK with BCC are piloting a new programme for 2-4 year olds. The emphasis no longer being on weight change but on getting families active and supported re parenting issues such as weaning, snack and healthy drink choices and signposting to ongoing support in the community.

Data for the senior ages of 12-16 years old indicates stable completion rates and in year 3 an increase in percentage of completers reducing the BMIz and waist circumference

Data for the senior ages of 12-16 years old also indicates stable data for completers consuming 5 A DAY and completing 60 minutes activity a day and in year 3 a decrease since year 2 of the completers decreasing sedentary behaviour

Behavioural outcomes including reporting eating more fruit and vegetables, reducing sedentary behaviour and undertaking 60 minutes physical activity daily have all increased (at 12 weeks) since year 1. User feedback of the ANK programme is extremely positive with 92% of parents and carers indicating that in year 3 the programme was excellent.

Healthy Weight Nurses

The team of Healthy Weight Nurses are provided by the Community Children's Health Partnership. The three nurses provide individual and family sessions for very overweight children or children with special needs. They provide tailored support such as food shopping, cooking skills and signposting to local sports groups or community / free activities. They work in partnership with CAMHS, paediatricians and dietitians as required. This team also support parents and carers with NCMP feedback. They receive very positive feedback from the training sessions and report successful outcomes with clients. The Healthy Weight nurses also provide training for school nurses and health visitors using motivational interviewing techniques.

In addition to the above mentioned tier two services for children and young people, A specialist service delivered by dietitians is available for children with more specific needs this can be seen on the Healthy Weight care pathway

<http://cchp.nhs.uk/sites/default/files/attachments/Bristol%20Care%20Pathway%20For%20Child%20Weight%20Management.pdf>

Tier 3 Commissioning arrangements for the Bristol tier 3 service are provided by UHBT. The CoCo Clinic provides more intensive and longer intervention for severely morbid children and young people (>99th centile) The Healthy Weight nurses link with the Co Co clinic but this is not a service commissioned by Public Health.

6) What is on the horizon?

- There have been national reductions to the Public Health budgets, resulting in a review of all spending on public health programmes.
- Bristol has seen changes in the child population. Bristol has 84,742 children under 16 and 70,677 young people 16-24. Since 2006 we've seen an increase in the child population aged from 0 – 12yrs, as well in the age-groups attending further education 19 – 24yrs. There are around 7,000 more pre-school age children in the city than there were 10 years ago, and nearly 8,000 more children of primary school
- Bristol launched the Great Weight Debate on May 23rd 2017 this will launch the Bristol Healthy Weight Strategy work which is in development but when complete will influence Healthy weight work in Bristol and provide an action plan. Bristol is looking at developing a whole systems approach to obesity. <https://www.bristol.gov.uk/social-care-health/get-involved-in-the-great-weight-debate>
- Development of an integrated training programme for health professionals and early years which will cover a range of public health topics including healthy weight.
- Procurement of an integrated healthy lifestyle service to include the tier two children and young people's weight management support, this will offer the family approach outlined in the evidence base. <https://bristol.citizenspace.com/neighbourhoods/bristol-behaviour-change-for-healthier-lifestyles/>
- The Sugar Smart Bristol Campaign launched on Friday 13th January 2017 and is a high profile campaign focussed on reducing sugar intake and raising awareness of links to health.
- This campaign will run for a minimum of 2 years and the aim is to embed this within all local programmes for sustainable and long term messages. <https://www.bristol.gov.uk/web/live-well-bristol/sugar-smart> Needs assessment to be undertaken for physical activity for children and young people
- Needs assessment to be undertaken for physical activity for adults
- Needs assessment on sustainable food

7) Local views

School Feedback

Locally schools have outlined a need for self-esteem work to be undertaken with year 5 children to build in resilience for the year 6 NCMP measurements. This need is confirmed by small clusters of year 6 students opting out of the NCMP measurements and indicating concerns / anxiety about the measurements. It is recognised that it would also be useful to replicate this type of work with families.

Current providers have been asked for examples of local feedback, also included is consultation from the Healthy Weight Debate and the Sugar Smart

NCMP Feedback 2015- 2016

Bristol City Council commission CCHP to deliver the NCMP, this includes written feedback for all parents and carers of children who are found to be overweight and or very overweight.

Negative feedback from the NCMP is very low in Bristol with the few complaints received accounting for 0.02% of children measured. All complaints are responded to promptly and in full.

Though complaints and negative feedback received are small numbers it has been noted that when received they usually relate to the NCMP feedback letter. Bristol City Council conducted a literature review in 2016, this was specifically in relation to NCMP feedback, and the summary appears to indicate that both in the UK and internationally, child obesity screening programmes which include BMI notification have shown limited impact in terms of parental engagement and behaviour change. The nature and quality of the evidence base, including prevailing low response rates, restricts the ability to make definite recommendations.. While the evidence does not point to a *direct* link between

the NCMP and such adverse outcomes, parents' concerns must be taken into account in order to engage them. Parent-only interventions which emphasise positive approaches with a reduced focus on weight and an emphasis on positively promoting health and enjoyment may be advantageous. The steering group continually reviews best practice and any way the delivery in Bristol can be improved. BCC is currently working with the provider CCHP to review the parental feedback letter.

ANK 2015/16

ANK the local tier two weight management programme request evaluation at the end of every programme. Staff leading the programme reported previously that all weight management pathways and strategies need to be widely communicated to ensure that all parties are aware of the programme and how to make a referral. Working closely with the Healthy Schools team has raised awareness of the ANK programme amongst local schools however ensuring that all staff are aware and confident in delivering healthy weight messages is still a need.

Figure 29 Service users feedback at the end of the ANK programme:

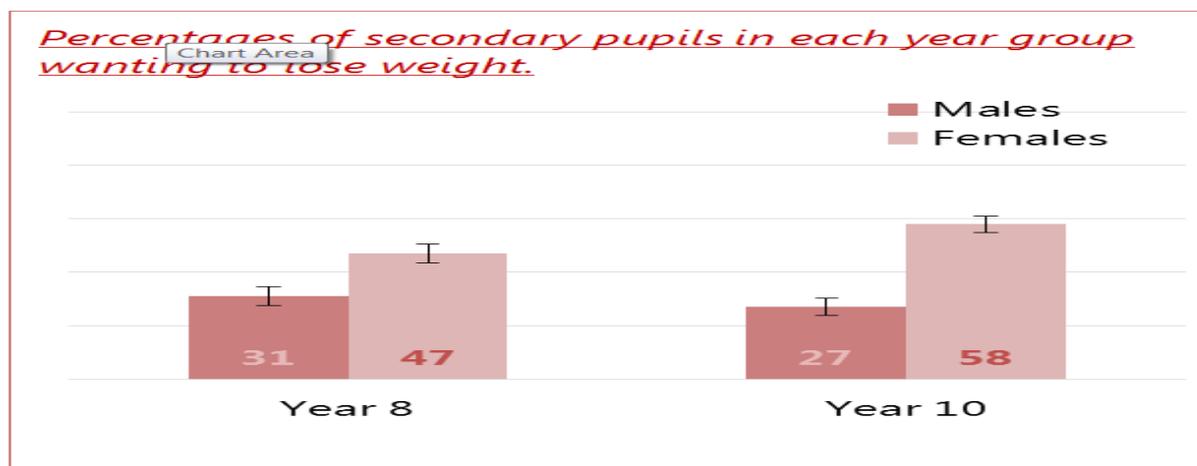
| | | | | | |
|---|-----|-----|------|------|-----|
| % participants completing the programme rating the service satisfactory or better | 96% | 96% | 100% | 100% | 97% |
| Patients Safety –Total number of serious untoward incidents | 0 | 0 | 0 | 0 | 0 |
| Client complaints | 0 | 0 | 0 | 0 | 0 |

The ANK programme has never had to record a safety incident nor have they ever received a complaint from service users.

Pupil Voice Survey

Bristol schools have the opportunity to access the Pupil Voice survey. Children are surveyed on a range of healthy lifestyle issues at year 4 and year 6. This survey is replicated bi-annually and allows schools to identify areas to prioritise and a comparison with the England average.

Figure 30 Bristol Pupil Voice Data 2015 Secondary Pupils Views on losing weight.



Over half the female respondents to the pupil voice reported wanting to lose weight. In addition reported data showed that 14% of all secondary school respondents felt they were being 'picked on' or bullied due to their size or weight. 19% reported the way you look as a reason for bullying. These were the two highest reported perceived reasons for being 'picked on' or bullied in secondary school in Bristol. 14% of all surveyed indicated size and or weight as a reason for being 'picked on' or bullied at school.

B: What does this tell us?

8) Key issues and gaps

Key issues in Bristol:

- Rising levels of overweight and very overweight children aged 10 and 11 years though still similar to England and lower than many of the core Cities rates are at 20 15/6 still rising which is of concern
- Rising rates of overweight and obesity levels in the Bristol East area
- Obesity has strong links to Deprivation –both nationally and locally in Bristol
- Weight management Services capacity is significantly less than the number of overweight / obese children and young people

Gaps:

- Lack of Parenting skills courses / training
- Linking physical activity offers to fun, healthy weight and health.
- Resilience building to raise awareness and self-esteem in KS2
- Emotional health and wellbeing support for both parents, carers and children and young people
- Free access to local leisure and physical activity for children, young people and families accessing tier two weight management services –N.B There is a JSNA chapter addressing the environmental issues which includes more information regarding this.
The Association of Young People Health Promise survey saw both young people and their parents and carers highlighting that weight management support should consider local gym / sports memberships

9) Knowledge gaps

There is a gap in Bristol data relating to Healthy Weight nurse referrals and outcomes

This has been identified and on-going outcomes agreed as part of the new CCHP provider contract from 2017.

Research data is lacking in areas including on clear evidence of what works to achieve long term behaviour change, weight loss and maintenance. Limited data is available on cost effectiveness of weight management lifestyle interventions.

Bristol also lacks data in the areas of:

- School meal data particularly from all Academies as this is a voluntary data submission from Academies
- Obesity data and numbers of Looked After Children (LAC) accessing tier two services
- Obesity data and numbers of Learning Disability Children accessing tier two services
- Evidence of effective prevention in early years
- Service user feedback on Healthy Weight nurse service provided by CCHP, this is being built into on-going outcomes.
- Ethnicity data from the NCMP for reception children.

C: What should we do next?

10) Recommendations for consideration

Recommendations are based on gaps identified from the NICE audit, the current provision offer and outcomes of current services and recommendations from the draft Bristol Healthy Weight Strategy. These include to:

Strategic

- Implement a Bristol Whole Systems and city-wide Approach to addressing Obesity.
- Implement the Healthy Weight Strategy Action Plan which includes recommendations of the JSNA chapter.
- Develop training programmes to ensure professionals are aware of the causes and support available to people to maintain a healthy weight.
- Ensure emotional health and wellbeing is embedded into the delivery of this strategy.
- Refresh and relaunch the Bristol Healthy Weight Pathway for children and young people.

Prevention

- Ensure wide communication and awareness of both the Great Weight Debate and the refreshed Healthy Weight Care pathway.
- Continue promoting the Sugar Smart Bristol Programme, across early years; Schools; Colleges; tier 2 providers and ensure the programme reaches all young people.

Early Years

- Engender healthy lifestyles throughout life with evidence based early intervention during the critical 1001 days of a child's life, from conception to age 2.
- Ensure early years, schools and other education settings make the environment health promoting and teach the skills for life required to lead healthy lifestyles.
- Include parents and carers e.g. in activities related to health/healthy environment' to support knowledge and skills development

Schools

- Ensure early years, schools and other education settings make the environment health promoting and teach the skills for life required to lead healthy lifestyles.
- Enable and empower communities to improve individuals and families' relationship with food
- Enable and empower communities to improve individuals and families' physical activity levels.
- Working in partnership with CCHP review and update the local NCMP feedback letter to parents and carers.
- Ensure sport, physical activity and recreational clubs and groups are inclusive and accessible to all.
- Ensure interventions are targeted towards vulnerable groups at highest risk of overweight.
- Promote Breakfast clubs in schools and the use of community breakfast clubs
- Increase support to build resilience for KS2/3 children regarding healthy weight by using the Healthy School programme.

Treatment

- Review, clarify and support the role of the GP, health visitors, family support workers and school nurses in their role within the NCMP programme and in identifying, signposting and supporting and identifying children and young people who are overweight and or obese as appropriate.
- Provide a behaviour change programme which will enable individuals and families to take action to reduce their weight through provision of information, guidance and coaching
- Continue to offer locally appropriate, accessible and evidence-based weight management services for children, young people, and families and ensure that this is widely promoted to raise awareness, increase referral rates and promote self-referral. In addition to ensure those at most need of support are aware and able to access services offered. This will be addressed via the Bristol Behaviour Change for healthier lifestyle programme procurement.
- Consider provision of intensive and longer programmes that include a psychological support element / support for the more severely obese children and young people
- To consider and refer appropriately to social prescribing opportunities

Other

- All services offered to record service user feedback in order to continually improve service delivery.
- To bridge knowledge gaps identified by reviewing provider outcomes reported.
- Consider use of technology to offer support by quality assured apps
- Evaluate interventions and services to identify local success and align resource accordingly
- To ensure data recorded includes equalities monitoring
- Note: Recommendations around policy and practice for Childrens informal physical activity and play opportunities will be covered in the Healthy Place chapter.

11) Key contacts

Key commissioning/strategic group who own the chapter

Named leads within Bristol City Council and Bristol CCG with email addresses.

Great Weight Working group with reports to the Great Weight steering group.

PH Analyst David Thomas David.thomas@bristol.gov.uk

Rachel Cooke Rachel.cooke@bristol.gov.uk

Jo Williams Jo.williams@bristol.gov.uk

Beth Bennett-Britton Beth.Bennett-Britton@bristol.gov.uk

Wendy Parker Wendy.parker@bristol.gov.uk

Claire Lowman Claire.lowman@bristol.gov.uk

Grace Davies Grace.davies@bristol.gov.uk

Jessica Williams J.williams@bristol.gov.uk

Sue Moss Sue.moss@bristol.gov.uk

Sally Hogg Sally.hogg@bristol.gov.uk

Glossary

ANK Alive 'N' Kicking –Tier 2 Weight Management Provider

BMI Body Mass Index - is an easy calculation of weight-for-height that is used to classify underweight, overweight and obesity in adults and children. It is defined as the weight in kilograms divided by the square of the height in metres (kg/m²).

CAMHS Child and adolescent mental health services

CCHP Community Child Health Partnership –Commissioned provider of the NCMP

JSNA Joint strategic needs assessment

NCMP National Child Measurement Programme

NOO National Obesity Observatory

Obese (child) above the 98th percentile when compared with the UK 1990 growth chart for age and gender of the child.

Overweight (child) between the 91st and 98th percentile when compared with the UK 1990 growth chart for age and gender of the child

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health

PHOF Public Health Outcomes framework

References

Arora T, Hosseini-Araghi M, Bishop J, Yao GL, Thomas GN, Taheri S. 2013. The complexity of obesity in U.K. adolescents: relationships with quantity and type of technology, sleep duration and quality, academic performance and aspiration. *Pediatr Obes.* Oct;8(5):358-66. doi: 10.1111/j.2047-6310.2012.00119.x

Baird, J; Fisher, D; Lucas, P; Kleijnen, J; Roberts, H and Law, C (2005) Being big or growing fast: systematic review of size and growth in infancy and later obesity. *BMJ* 2005; 331:929

Barlow, J; Whitlock, S; Hanson, S; Davis, H; Hunt, C; Kirkpatrick, S; and Rudolph, M ,2010, Preventing obesity at weaning: parental views about the EMPOWER programme, *Child: care, health and development*, **36**, 6, 843–849

Bhattacharjee, D; Davies, A, Physical Activity through Active Travel, Briefing Note: A best available opportunity for enhancing academic attainment among school pupils. 2015, Bristol City Council

British Heart Foundation, The Physical Activity Statistics, 2015, London

Bristol Public Health Knowledge Service, Aug 2016, <http://content.digital.nhs.uk/article/7486/National-Child-Measurement-Programme-shows-increased-obesity-prevalence-in-primary-schools>

2012-15, Source: Bristol Public Health Knowledge Service, Aug 2016

Bristol Pupil Voice Report, 2015, Bristol City Council

Childrens Food Trust, 2016 <http://www.childrensfoodtrust.org.uk/blog/census16/>

Children Food Trust, 2016, State of the nation report, London
http://media.childrensfoodtrust.org.uk/2016/12/SoN_Report_v4.pdf

Department for Education, Annual School Census, 2016,
[dera.ioe.ac.uk/24566/1/2015 to 2016 School Census Guide V 1 8.pdf](dera.ioe.ac.uk/24566/1/2015_to_2016_School_Census_Guide_V_1_8.pdf)

Dinsdale H, Ridler C, Ells L J. 2011. A simple guide to classifying body mass index in children. Oxford: National Obesity Observatory.

Director of Public Health Annual Report, Living Well for Longer –The Case for Prevention, 2016
Bristol City Council.

European Youth Tackling Obesity 2015. A Youth Lead Social Marketing Approach to encourage Healthy Lifestyles, <http://www.eyto.org.uk>

Fair Society, Healthy Lives. 2010. The Marmot Review. www.ucl.ac.uk/marmotreview..ISBN 978–0–9564870–0–1

Generation UK, 2016, An analysis of the UK's childhood inactivity epidemic and tangible solutions to get children moving, London.

HM Government. 2016. Childhood Obesity: A Plan for Action
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/546588/Childhood_obesity_2016_2_acc.pdf

Kelly Y, Goisis A, and Sacker A (2015) Why are poorer children at higher risk of obesity and overweight? A UK cohort study. The European Journal of Public HealthLaureas, Sport for Good Foundation. Teenage Kicks: The Value of Sport in Youth Crime, 2011

Murray et al (2013) UK Health Performance: Findings of the Global Burden of Disease Study 2010. The Lancet 381:997-1020

National Childhood Measurement Programme shows increased obesity prevalence in primary schools, NHS Digital 2015

National Institute for Healthcare Excellence, PH47 Weight management: lifestyle services for overweight or obese children and young people, 2013, London

National Obesity Observatory 2016
http://webarchive.nationalarchives.gov.uk/20170110170210/https://www.noo.org.uk/NCMP/National_report

National Obesity Observatory, 2011
<https://khub.net/documents/31798783/32039025/Obesity+and+ethnicity/834368ce-e47a-4ec6-b71c-7e4789bc7d19?version=1.0>

Oude Luttikhuis H, Baur L, Jansen H, Shrewsbury VA, O'Malley C, Stolk RP, Summerbell CD. Interventions for treating obesity in children. Cochrane Database of Systematic Reviews 2009, Issue 1. Art. No.: CD001872. DOI: 10.1002/14651858.CD001872.pub2

Pischon et al (2008) General and Abdominal Adiposity and Risk of Death in Europe. The New England Journal of Medicine. 359:2105-2120

Public Health England, National Diet and Nutrition Survey 2016, London

Public Health England, Guidance, Childhood obesity: applying All Our Health, 2015, London

Royal College of Paediatrics and Child Health, State of the child Health Report, 2017

Rudolf, M. C. J. (2010) Tackling obesity through the healthy child programme: a framework for action.

School Food Trust, Research Report, Primary School Food Survey, School Lunches Verses Packed Lunches, 2009, London

Scientific Advisory Committee on Nutrition (2015). Carbohydrates and Health

Shepherd, J; Harden, A; Rees, R; Brunton, G; Garvia, J; Oliver, S; and Oakley A (2005). Young People and Healthy Eating: a systematic review of research on barriers and facilitators. Health Education Research 21(2); 239-257. DOI: <https://doi.org/10.1093/her/cyh060>

Waters E, de Silva-Sanigorski A, Hall BJ, Brown T, Campbell KJ, Gao Y, Armstrong R, Prosser L, Summerbell CD. Interventions for preventing obesity in children. Cochrane Database of Systematic Reviews 2011, Issue 12. Art. No.: CD001871. DOI: 10.1002/14651858.CD001871.pub3

What About Youth Study (WAY), NHS Digital, 2015 <http://content.digital.nhs.uk/article/3742/What-About-Youth-Study>

WHO 2009, Global Health Risks, Mortality and burden of disease attributable to selected major risks

Who, 2015: WHO Global InfoBase data on overweight and obesity. Fact sheet No 311 on obesity.