



Bristol JSNA Chapter 2017-18 Adult Healthy Weight in Bristol

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#### **Executive summary**

#### Introduction

The terms overweight and obesity (together referred to as excess weight) refers to when weight gain, in the form of fat, has reached a point which affects a person's health (WHO, 2014). Being overweight or obese are preventable conditions that are associated with an increased risk of a number of common diseases and causes of premature death, including Type 2 diabetes, cardiovascular disease and some cancers (Prospective Studies Collaboration, 2009; Calle et al, 2003). The risk of poor health increases sharply with increasing body mass index (BMI) (Kopelman, 2007). Obesity is estimated to be the fourth largest risk factor contributing to deaths in England (after hypertension, smoking, and high cholesterol) (NHS Atlas of Risk 2016).

In 2015/16 there were 525 thousand admissions in NHS hospitals where obesity was recorded as the primary or secondary diagnosis. This is an increase of 19% on 2014/15 (NHS Digital, 2017).

The latest estimate from the national Active Lives survey for 2015/16 indicated that 55% of women and 68% of men in England were overweight or obese (Sport England 2017). Obesity prevalence increased from 15% in 1993 to 27% in 2015. Research has shown that the burden of obesity falls particularly on those in lower income households, in more deprived areas of the country and is a driver of health inequalities (Marmot, 2007).

There is a complex relationship between gender and obesity that varies amongst different age and income groups. Overall, men in England are more likely to be overweight than women, but women are more likely to be obese. The same pattern is evident in Bristol. Overall the prevalence in the city is lower than the national average, Bristol: 56.0% vs England: 61.3%, (Sport England 2017).

There has been a levelling out of obesity overall but this tends to be in more affluent societies, with less affluent areas experiencing increasingly higher rates of obesity (National Obesity Forum 2014) and with certain groups being more at risk e.g. lower socio-economic and socially disadvantaged groups, particularly women, children and young people (Marmot 2010, HSCIC 2014, HSCIC 2015).

Prevalence of obesity is generally higher in older age groups for both men and women. Within ethnic minority groups women, of Black Caribbean origin are more likely to be obese than the general population, along with women of Black African and Pakistani

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origin. Men of Irish origin are also more likely than the general population to be obese (Department for Health, 2011).

Other groups of people at risk include: adults and children with physical impairments, particularly in terms of mobility which makes exercise difficult (Gatineau M et al 2013; Gatineau M. 2014b); people with learning difficulties and people diagnosed with a severe and enduring mental illness, particularly schizophrenia or bipolar disease (Gatineau M et al 2013). The prevalence of obesity has been reported to be as high as 55% in those with severe mental illness; physical inactivity, unhealthy diets and weight gain from psychotropic medication are all factors that contribute to this (NICE, 2014).

Currently, there is no government strategy or action plan for adult obesity. There is a childhood obesity action plan which will clearly have an effect on adult obesity if taking a family approach to tackling this issue. The government have also supported a new obesity policy research unit at University College, London to look at long term policy for childhood obesity.

Public Health England (PHE) have recently been running campaigns on obesity, opting to encourage more awareness of an individual's calorie intake through their '100 kcal' snack and the 400:600:600 kcal meal campaigns. Locally the Sugar Smart Bristol and Teaching a City to Cook programmes are supporting the healthy weight agenda.

# Disclaimer

This chapter focusses on adult overweight and obesity only. There are separate JSNA chapters for childhood obesity, the obesogenic environment (Healthy Place), out of home food environment and physical activity.

# Key issues and gaps (summary of section 8)

An integrated Tier 1, 2 and 3 obesity prevention and weight management pathway is in place. Tiers 1 and 2 in Bristol are led by Public Health; Tiers 3 & 4 are led by South Gloucestershire for the Bristol, North Somerset and South Gloucestershire Clinical Commissioning Group (BNSSG CCG), providing a Weight Assessment and Management Service across the three areas. Demand for the Tier 3 service is high and there is currently a waiting list to access these services.

There is a need to strengthen local assets to ensure that obesity is being tackled as effectively as possible within available resources. This supports the development of a Healthy Weight Strategic Action Plan recognising the need to work across the wider

public health workforce and in partnership with local businesses and healthcare organisations.

There is a need to promote and develop cooking skills, improve knowledge of healthy eating, ensure everyone has access to affordable healthy foods, skills in growing food and increasing physical activity in priority communities.

More partnership working is required to promote healthy weight and links to other pathways need to be stronger, eg Tiers 3 & 4 Weight Assessment and Management Services, Social Prescribing, and Type 2 Diabetes prevention programme. More emphasis needs to be given to prevention and early intervention of excess weight through improving understanding of the importance of good nutrition and physical activity and increasing resources and accessibility for these. Use of digital information including apps and online services needs to be improved. The impact of food outlets and takeaways needs to be addressed.

#### Recommendations

- 1. Take a City wide approach to tackling obesity, taking the learning from cities where population excess weight is in decline, for example, Amsterdam
- 2. Promote and develop cooking skills, improve knowledge of healthy eating, skills in growing food and increasing physical activity engaging the whole family.
- 3. Ensure services support people to reduce stress and increase self-esteem and emotional wellbeing to assist with weight loss.
- 4. Support health professionals and workplaces to understand, recognise and address the issue of weight.
- 5. Improve partnership working to promote healthy weight
- 6. Improve links to other pathways including the Tiers 3 & 4 Weight Assessment and Management Services, Social Prescribing, and Type 2 Diabetes prevention programme
- 7. More emphasis needs to be given to prevention and early intervention of overweight and obesity through improving understanding of the importance of good nutrition and physical activity and increasing resources and accessibility for these.
- Increase the number of health promotion programmes that focus on one particular issue, making messages easier to understand and follow, eg Sugar Smart Bristol
- 9. Increase opportunities to introducing healthier and more sustainable food into public places and key institutions/businesses in the city.

- 10. Take action to improve the food offer in food outlets/takeaways.
- 11. Make better use of digital information including apps and online services.
- 12. Better links need to be made between weight management services and those dealing with Type 2 diabetes and the National Diabetes Prevention Programme.

#### JSNA chapter report

#### A: What do we know?

#### 1) Who is at risk and why?

#### 1.1 What is the issue?

The terms overweight and obesity (also known as excess weight) refers to the time at which weight gain, in the form of fat, affects a person's health. It is important to maintain weight within a healthy range (rather than having a weight that is too high or too low) (WHO, 2014).

There is an increasing trend in prevalence of adult overweight and obesity in Bristol and Nationally.

#### **1.1.1 Defining obesity:**

In adults (men and women aged 18 and over) there are two main methods of assessing weight and its impact on health: Body Mass Index (BMI) and waist circumference (NICE, 2014). Body Mass Index (BMI) is the best way to measure the prevalence of obesity and is defined as weight in kilograms divided by the square if the height in metres (kg/m2). NICE (2014) recommends that BMI be used to classify the degree of obesity. Excess weight in adults is described as having a BMI over 25 (Table 1). NICE (2014)

Classification	Body Mass Index (kg/m <sup>2</sup> )
Healthy Weight	18.5–24.9
Overweight	25-29.9
Obesity I	30-34.9
Obesity II	35-39.9
Obesity III	Over 40

#### Table 1: Definitions of overweight and obesity – Body Mass Index ranges

BMI is not always an accurate measure of body fat and/or fat distribution. This is particularly the case in muscular individuals (NOO, 2009) and for some people from Black, Asian and minority ethnic groups.

Waist circumference is used to assess abdominal fat mass or central fat distribution (Table 2). These are linked to a higher risk of diseases such as Type 2 diabetes and coronary heart disease.

<b>BMI Classification</b>	Waist Circumference			
	Low	High	Very High	
Normal weight	No increased risk	No increased risk	Increased risk	
(18.5-24.9)				
Overweight (25-	No increased risk	Increased risk	High risk	
29.9)				
Obesity I (30-34.9)	Increased risk	High risk	Very high risk	
For men, waist circum	ference of less than 94	cm is <b>low</b> , 94–102 cm i	s <b>high</b> and more than	
102 cm is <b>very high</b> .	102 cm is <b>very high</b> .			
For women, waist circumference of less than 80 cm is <b>low</b> , 80–88 cm is <b>high</b> and more				
than 88 cm is <b>very high</b>				
(NICE, 2014)	(NICE, 2014)			

#### Table 2: Health risk based on BMI and waist circumference

Black, Asian and other Minority Ethnic groups (BAME) are at higher risk of type 2 diabetes, other health conditions or mortality at equivalent BMI levels. For Asian (South Asian and Chinese), Black African and African-Caribbean populations NICE (2013) recommends that the above thresholds are reduced so that 23kg/m2 indicates increased risk and 27.5kg/m2 indicates high risk. Table 3 shows how the thresholds vary between gender and ethnicity (NICE, 2013).

		· · · · · · · · · · · · · · · · · · ·
European	Men	≥ 94cm (37 inches)
	Women	≥ 80cm (31.5 inches)
South Asians, Chinese, Japanese, ethnic	Men	≥ 90cm (35 inches)
south and central Americans	Women	≥ 80cm (31.5 inches)
Sub Saharan Africans, Eastern	Use European	data until more specific data are
Mediterranean and middle east (Arab)	available.	
populations		
(NICE, 2013)		

#### Table 3: Waist Circumference thresholds as a measure of central obesity with increased health risk

#### 1.1.2 The Health Impacts of Excess Weight

It is forecast that the increasing trend for adults to be overweight or obese may continue and that by 2050 nationally, obesity ( $\geq 30$ kg/m<sup>2</sup>) will affect 60% of males and 50% of females and 25% of children aged 2-15 (Butland B et al., 2007). Being overweight or obese is a cause of chronic disease leading to early death. It is estimated that this would be at a cost to the NHS and Social Care of £2.47 billion at 2016 prices (Tovey 2017).

It is estimated that 35,820 deaths resulted from overweight and obesity in England and Wales in 2014 (Tovey 2017). Ten percent of all cancer deaths among non-smokers are related to obesity (WHO, 2004). Obesity reduces life expectancy by 2-4 years (BMI range 30-35 kg/m<sup>2</sup>) and severe obesity reduces it by 8-10 years (BMI range 40-50 kg/m<sup>2</sup>) (PHE, 2016). The 8-10 years life lost is equivalent to the effects of lifelong smoking (PHE, 2016).

Excess weight can reduce overall quality of life and is the third largest contributor to disabilityadjusted life years (DALYs) the number of "healthy years" lost due to ill health, disability or early death in England (Newton J et al, 2015). Raised BMI is a major risk factor for non-communicable diseases such as type 2 diabetes (Gatineau M et. al. 2014a), hypertension (high blood pressure), and hyperlipidaemia (high levels of fats in the blood that can lead to narrowing and blockages of blood vessels), which are major risk factors for cardiovascular disease and related mortality. The extent to which obesity increases the risks of developing a number of diseases relative to the non-obese population is given in Table 5.

NHS Digital report on Statistics on Obesity, Physical Activity and Diet - England, 2018 found that in 2016/17 there were 617,000 admissions in NHS hospitals (Table 4) where obesity was a factor, an increase of 18% on 2015/16. 26% of adults were classed as obese, an increase of 15% since 1993,

but similar to levels in 2010.

# Table 4: Admissions to hospital where obesity was a factor – updated April 2018. Regional and National comparisons with Bristol.

#### Regional and national comparisons

Bristol, City of	
8,775	2,105
Admissions	Admissions per 100,000
South West	
77.250	1.405
Admissions - Region	Admissions per 100,000 - Region
England	
616,961	1,159
Admissions - England	Admissions per 100,000 - England

'Blank' indicates a value between 1 and 5 that has been suppressed

#### Admissions per 100,000 population by year



The four key metabolic/physiological changes that increase the risk of chronic illness (or long-term illness) are raised blood pressure, excess weight, hyperglycaemia (high blood glucose levels) and hyperlipidaemia (high levels of fat in the blood). These are contributed to by negative lifestyle behaviours such as, tobacco smoking, physical inactivity, unhealthy diet and the harmful use of alcohol.

Table 5: Relative	risk factors for obese	peo	ple of develop	ping selected	diseases. b	v gender
		PCC			alocabed, k	J Benaci

England	Relative risk:	
Disease type:	Male	Female
Type 2 Diabetes	5.2	12.7
Hypertension	2.6	4.2
Myocardial Infarction	1.5	3.2
Cancer of the colon	3.0	2.7

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Angina	1.8	1.8
Gallbladder disease	1.8	1.8
Ovarian Cancer		1.7
Osteoarthritis	1.9	1.4
Stroke	1.3	1.3
Breast Cancer		??
Non Alcoholic Fatty Liver disease (NAFL)	<u>;</u> ;	??

Source: National Audit Office, NAO 2001

# 1.1.3 Type 2 Diabetes

Type 2 diabetes accounts for at least 90% of all cases of diabetes. Being overweight or obese is the main modifiable risk factor for type 2 diabetes and the rising prevalence of obesity will continue to lead to a rise in the prevalence of type 2 diabetes (Gatineau M et. al. 2014a).

# 1.1.4 Depression and anxiety

There are bi-directional associations between common mental health problems and obesity, with levels of obesity, gender, age and socioeconomic status being key factors (Gatineau M & Dent M. 2011). Obese individuals face stigma and multiple forms of prejudice and discrimination. Weight bias remains persistent in settings of employment, health care, education, the media and in close interpersonal relationships. Weight bias increases vulnerability to depression, low self-esteem, poor body image, maladaptive eating behaviours and avoidance of exercise (Puhl, R.M. & Heur, C.A. 2009).

# 1.1.5 Causes of overweight and obesity:

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 (WHO, 2015).

Changes in dietary and physical activity patterns are often the result of environmental and societal changes associated with development and lack of supportive policies in sectors such as health, agriculture, transport, urban planning, environment, food processing, distribution, marketing and education (WHO, 2015). However there are many complex behavioural and societal factors that combine to contribute to the causes of obesity, which are also identified in the Foresight Report (2007). The report presented an obesity system map with energy balance at its centre. Around this, over 100 variables directly or indirectly influence energy balance. Some of these will be picked up in other JSNA chapters (refer to introduction).

#### Obesity systems map (Foresight 2007) Diagram from:

www.publichealthmatters.blog.gov.uk/2015/07/17/expert-interview-new-sugar-recommendations



# **1.2 Fixed risk factors:**

The 2015/16 Active Lives derived estimates of national adult excess weight prevalence, include a range of demographic factors in their analyses (Sport England 2017).

Table 6: Prevalence of adult excess weight (BMI>25), 2015-16, by gender, age group and broadethnicity categories, estimates from the national Active Lives survey (Sport England 2017).



# 1.2.1 Age

The age group most likely to be overweight or obese is age 55-64, but only by a small margin. The adult age group least likely to be obese is 16-24 year olds, with two-thirds at normal weight and only one-third who are overweight or obese. (HSCIC, 2016)

# 1.2.2 Gender

There is a complex relationship between gender and obesity that varies amongst different age and income groups. Overall, men in England are more likely to carry excess weight ( $\geq 25$ kg/m<sup>2</sup>) than

women, but women are more likely to be morbidly obese (≥40kg/m<sup>2</sup>) than men. (PHE 2017). Over the age of 85 years women are more likely to be obese (≥30kg/m<sup>2</sup>) compared to men.

Current obesity rates for men are lower in younger adult years than for women, and reach a peak for men between the ages of 45–54. Women are more at risk of becoming obese in their younger years, and remaining obese through their adult lives.

In general adult women have much higher rates of obesity at lower income levels than men (HSCIC, 2015; Stafford et al. 2010), while rates of obesity for men appear much more affected by work environment, pressures and various employment behaviours and anxieties (Church et al. 2011; Schulte et al. 2007).

Women are less likely to have co-morbidities as a result of obesity than men, eg CVD and diabetes; however, male ratios are higher for the majority of the other single morbidities and comorbidities at each age. Prevalence ratios increase with age (age gradient) for the single morbidities CVD and diabetes, and the comorbidities of obesity & CVD, and CVD & diabetes (Morrissey et al. 2015).

# 1.2.3 Ethnicity

Data from the Active Lives Survey for England 2015-2016 highlights differences between ethnic groups for prevalence of excess weight. Standard BMI measurement alone may not be a good indicator of greater risk of CVD and diabetes (Sport England 2017).

# 1.2.4 Deprivation

The prevalence of excess weight varies by household income for women but not men. Women in second lowest quintile of household income had highest mean BMI and highest prevalence of obesity, 39% compared with 17% women in highest quintile of household income. Similarly waist circumference varied for both men and women with 55% women in 2<sup>nd</sup> lowest quintile compared to 37% in highest income quintile. This is reflected in Bristol where 4<sup>th</sup> deprivation quintile tends to have higher rates of obesity than 5<sup>th</sup> (Health Survey for England 2015).

# 1.2.5 Disabled People.

There is a significant increase in the prevalence of obesity for disabled people. The reasons for this are both cause and effect, where biological factors directly affect the chances of excess weight gain and the impairment reduces the options for maintaining a healthy weight. For adults and children with physical impairments there are difficulties in terms of mobility which makes exercise difficult (Gatineau M et al 2013; Gatineau M. 2014b). People with learning difficulties and people diagnosed with a severe and enduring mental illness, particularly schizophrenia or bipolar disease are also at higher risk (Gatineau M et al 2013). The prevalence of obesity has been reported to be as high as 55% in those with severe mental illness; physical inactivity, unhealthy diets and weight gain from psychotropic medication are all factors that contribute to this (NICE, 2014).

# 1.3 Modifiable risk factors

# 1.3.1 Sleep

Research has found a relationship between sleep and obesity. Sleep is a modulator of neuroendocrine function and glucose metabolism and sleep loss has been shown to result in metabolic and endocrine alterations. . Recent epidemiological and laboratory evidence confirm previous findings of an association between sleep loss and increased risk of obesity (Beccutia et al, 2011).

In the UK, recent research that examined night-time habits, sleep duration and quality of sleep, and obesity (among other categories) of adolescents, found that all three are very strongly correlated. Shorter sleep durations and poor sleep quality were positively associated with higher BMI. This was demonstrated to be partly, but strongly, connected to the use of technology at bedtime. The research suggested that the quantity of technology used was positively associated with BMI and that those who always engaged in video gaming had significantly higher BMI z-score vs. never-users (Arora et al. 2013).

# 1.3.2 Childhood abuse

Research has found a strong relationship between child abuse/maltreatment and elevated risk of developing obesity over the life-course (Danese, 2014; Hemmingsson et al, 2014) It is suggested that adverse life experiences during childhood plays a major role in obesity development, through poor coping responses, stress, mental and emotional distress and other factors (Hemmingsson et al, 2014.)

# 1.3.3 Smoking

Though both smoking and obesity are severe risk factors for cardiovascular disease, research shows that smoking is a negative risk factor for obesity, with smokers having on average much lower BMI than non-smokers, but a higher risk factor for cardiovascular disease (Dare et al. 2015; Booth et al. 2015). A study of nearly half a million British adults showed that former smokers are more at risk of obesity, than both current smokers and those who have never taken up smoking (Dare et al 2015). These recent studies are important in obesity demographics as they indicate that some people may take up or continue smoking as a method of weight control, despite the increased risks for other health related conditions. It is suggested that new therapeutic interventions for smoking must also include simultaneous intervention pathways for weight gain.

# 1.3.4 Maternal obesity

Obesity in pregnancy is associated with an increased risk of a number of serious adverse outcomes to both mother and infant. These include miscarriage, foetal congenital anomaly, thromboembolism, gestational diabetes, pre-eclampsia, postpartum haemorrhage, wound infections, stillbirth and neonatal death (Centre for Maternal and Child Enquiries 2010). It also increases the likelihood of childhood obesity (Centre for Maternal and Child Enquiries 2010).

# 1.3.5 Other

There are also key life stages when people are more likely to put on weight (Butland B et al., 2007), and include;

- Men in their late 30s
- Women entering long-term relationships
- Women during and after pregnancy
- Women at menopause
- People who retire
- People suffering psychological problems such as stress and depression

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

# 2.1 Excess Weight in Bristol

This lifestyle issue is affecting the population of Bristol and impacting on the local rates of cardiovascular disease, diabetes and some cancers. The rates of obesity in Bristol whilst lower than the national average are not decreasing significantly to reduce the health related consequences, the impact on health inequalities and disability-free life expectancy in our population.

# Table 7: Prevalence of adult excess weight and adult obesity, 2005-15, from the Bristol Quality ofLife survey



The adult population (16yrs+) of Bristol in 2016 was estimated to be 365,000, of whom we would estimate that more than 200,000 are overweight or obese, and more than 70,000 obese. Bristol has a young population with a greater proportion of 19-40 year olds than the England average. If the majority of 16-24 year olds are least likely to be obese this presents an opportunity in Bristol to

provide good preventative services to ensure that this is maintained throughout adult life. These indicators do not adequately show the wide variations in numbers of adults with excess weight across Bristol with greater numbers living in the more deprived areas. The following two tables show that there are more men who are overweight and more women who are likely to be obese with higher prevalence for both in the more deprived wards.

Table 8: Prevalence of adult excess weight (BMI>25), 2015, by gender and deprivation quintile of place of residence, estimates from the Bristol Quality of Life survey







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# 2.2 Modifiable Risk factors in Bristol

# 2.2.1 Income and deprivation

Poverty and deprivation appear to be associated with a higher risk of excess weight in Bristol, but the relationship is complex and seems to affect women more than men. Data from the Quality of Life Survey suggests that the prevalence of excess weight in Bristol adults (overweight and obese) is relatively stable, but there are signs that within this group obesity is increasingly prevalent.

Table 10: Prevalence of adult excess weight (BMI>25), by ward of place of residence, estimates from the Bristol Quality of Life survey 2015.



Local data (Bristol Quality of Life 2015) indicates that the prevalence of adult male excess weight in

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Bristol is highest in Hengrove & Whitchurch Park (79%) and lowest in Ashley ward (19%). For women, the highest prevalence of excess weight is found in Hartcliffe and Withywood (63%) and the lowest in Central and Hotwells and Harbourside wards (15%). Adult obesity prevalence is highest for both men and women in Hartcliffe and Withywood.

# 2.2.2 Physical Activity

Bristol has an increasing trend in the numbers of adults who are active, which is likely to influence the prevalence of obese and overweight adults. As Bristol has a younger population profile than many cities this increasing trend in adults who are physically active will be an important contribution to reducing obesity levels in the future. However there are still large differences at ward level with the least deprived being the most active.

Table 11: Prevalence of adult excess weight and obesity, by response to exercise habits question,estimates from the Bristol Quality of Life survey 2015



Adults in Bristol are more than twice as likely to be obese if they do not exercise to recommended levels as those that do.

# 2.2.3 Smoking

National research suggests that smokers are less likely to be obese or overweight than non-smokers (Dare et al. 2015), however, this does not appear to be so in Bristol where smokers and non-smokers (includes ex-smokers) have similar prevalence rates.



# 2.2.4 Diet

There are recognised food deserts in Bristol – areas where people are living over 1000m away from supplies of healthy foods, and areas where there are high numbers of fast food outlets. These often correspond to areas of high deprivation. Further information on this is available in the JSNA chapter on 'Out of home food environment'.

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

The following national outcome framework indicators are relevant to excess weight:

# Public Health Outcomes Framework 2014 -16:

- 1. Increased healthy life expectancy Bristol is significantly worse than the England average for life expectancy at birth in both males 78.4 years and females 82.7 years.
- 2. **Healthy life expectancy** in males is 63 years and for females is 64 years which are similar to the England average,
- 3. **Reduced differences in life expectancy and healthy life expectancy between communities** Bristol has a gap of 16 years healthy life expectancy between the richest and poorest communities, where the most deprived communities live longer with a life limiting disability

# Wider determinants:

**1.16 Utilisation of outdoor space for exercise / health reasons** – Bristol has the lowest % people utilising outdoor space for exercise/health reasons across SW region, and is significantly worse than the England average at 10.8% (17.9%)

Improving Health:

2.11 Diet: Proportion of adults consuming 5 portions of fruit and veg per day is similar to the

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England average at 53.3

2.12 Excess weight in adults: Bristol is significantly better than the England average at 57.8% vs 64.8%

2.13i **Proportion of physically active adults:** Bristol is significantly better than England average – 72.6% vs 64.9%

2.13ii **Proportion of physically inactive adults:** Bristol is significantly lower than England average – 16.8% vs 22.3%

2.17 Estimated diagnosis rate for people with diabetes mellitus: Bristol has a lower rate of recorded diabetes than the England average.

# Healthcare, Public Health and preventing premature mortality:

4.03 Mortality rate from causes considered preventable

4.04 Under 75 mortality rate from cardiovascular diseases (including heart disease and stroke)

4.05 Under 75 mortality rate from cancer

4.13 Health-related quality of life for older people

NHS Outcome Framework:

Domain 1: Preventing people from dying prematurely

Reducing premature mortality from the major causes of death

1.1 Under 75 mortality rate from cardiovascular disease (PHOF 4.4\*)

1.2 Under 75 mortality rate from respiratory disease (PHOF 4.7\*)

1.3 Under 75 mortality rate from liver disease (PHOF 4.6\*)

1.4 Under 75 mortality rate from cancer (PHOF 4.5\*)

Reducing premature death in people with a learning disability

1.7 Excess under 60 mortality rate in adults with a learning disability

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

The evidence summarised in the National Obesity Observatory (2010) briefing shows that there is sufficient evidence to justify well-targeted action to manage and treat adult obesity. It states that interventions should be multi-component and focus on diet and physical activity together, rather than attempting to modify either diet or physical activity alone. There is good evidence that interventions which provide support and advice on physical activity and diet together are more likely to be effective for weight outcomes than single-component approaches.

Weight management interventions should include behaviour change strategies to: increase people's physical activity levels and/or decrease inactivity; improve eating behaviour and the quality of the person's diet; reduce energy intake and increase self-esteem. Many interventions have the potential to be delivered to families as well as to individuals.

Self-help, commercial or community weight management programmes should only be commissioned if they follow best practice. There are some population groups that may require more specific tailored interventions, for example, those with a learning disability, low income groups, Black, Asian and ethnic minority groups and pregnant women.

There is evidence that dietary, physical activity with behavioural interventions produced significant

improvements in weight among people with pre-diabetes and a significant decrease in diabetes incidence.

Evidence from the NICE guidance (2007) on behaviour change is also relevant for lifestyle interventions to prevent obesity. The guidance suggests that effectiveness is enhanced when people:

- understand the likely impact of their behaviour on their health
- feel positive/optimistic about changing their behaviour
- make a personal commitment to change
- set goals to undertake specific actions over a specified time
- plan changes in terms of easy steps
- plan for events or situations that might get in the way of change
- share their behaviour change goals with others (peer support)

NICE (2014, 2006) and DH (2010) guidance on adult weight management services recommend that local authorities commission a range of lifestyle weight management services that are multi-component. This covers:

- Address dietary intake
- Address physical activity levels
- Address sustained behaviour change
- Meet NICE (2014) guidance around staff skills and training
- Are effective at 12 months and beyond
- Are regularly evaluated
- Be able to take referrals and be promoted amongst a range of health professionals such as GP teams, pharmacies, health visiting, the NHS Health Check programme, services for smoking cessation, fertility or type 2 diabetes
- Ensuring services respond to local needs such as higher than average prevalence in men, older people, disabled people and the priority neighbourhoods. Population segmentation and community engagement techniques can be used to identify different groups and the best ways to engage them.
- Monitor mental health and mood of service users and ensure there is a pathway for referral into more specialist services
- Engage the family, not just the individual.

Guidance recommends that there is a local obesity pathway that enables individuals to move between tiers as needed. This pathway and all available options should be made clear to both professionals and the public. The pathway should include local services, facilities and groups, such as gardening schemes and community walking groups.

The following table provides a guide with links to the relevant guidance and frameworks.

Table 13: Guidan	ce and links
Guidance	Summary
PH42 —	Recommendation 1 Developing a sustainable, community-wide
Obesity:	approach to obesity
working with	Recommendation 2 Strategic leadership
local	Recommendation 3 Supporting leadership at all levels Public health
communities	teams should identify and work with 'champions' who have a
2012. Revised	particular interest or role in preventing obesity in local authority and
November	NHS strategy groups and public, private, community and voluntary
2016	sector bodies. This includes, for example, those involved in planning,
	transport, education and regeneration
	Recommendation 4 Coordinating local action
	Recommendation 5 Communication
	Directors of public health and local government communications
	leads should ensure elected members &I management and staff
	working with local communities, are aware of the importance of
	preventing and managing obesity
	Recommendation 6 Involving the community
	Recommendation 7 Integrated commissioning
	Recommendation 8 Involving businesses and social enterprises
	operating in the local area
	Recommendation 9 Local authorities and the NHS as exemplars of
	good practice
	Public health teams should ensure local authorities and NHS
	organisations develop internal policies to help staff, service users
	and the wider community achieve and maintain a healthy weight.
	Recommendation 10 Planning systems for monitoring and
	evaluation
	Recommendation 11 Implementing monitoring and evaluation
	functions
	Recommendation 12 Cost effectiveness
	Recommendation 13 Organisational development and training
	Recommendation 14 Scrutiny and accountability
NG7 –	Recommendation 1 Encourage people to make changes in line with
Preventing	existing advice
excess weight	Recommendation 2 Encourage physical activity habits to avoid low
gain	energy expenditure
March 2015	Recommendation <u>3 Encourage dietary habits that reduce the risk of</u>
	excess energy intake
	Recommendation <u>4</u> Further advice for parents and carers of children
	and young people
	Recommendation 5 Encourage adults to limit the amount of alcohol
	they drink
	Recommendation 6 Encourage self-monitoring
	Recommendation 7 Clearly communicate the benefits of
	maintaining a healthy weight

	Recommendation 8 Clearly communicate the benefits of gradual	
	improvements to physical activity and dietary habits	
	Recommendation 9 Tailor messages for specific groups	
	Recommendation 10 Ensure activities are integrated with the local	
	strategic approach to obesity	
CG189 –	Identification and classification of overweight and obesity	
Obesity:		
identification,	Assessment	
assessment		
and	Lifestyle interventions	
management	Multicomponent interventions are the treatment of choice. Ensure	
2014	weight management programmes include behaviour change	
	<u>Behavioural interventions</u>	
	Include the following strategies in behavioural interventions for	
	children, as appropriate:	
	stimulus control	
	self-monitoring	
	goal setting	
	<ul> <li>rewards for reaching goals</li> </ul>	
	<ul> <li>problem solving.</li> </ul>	
	Give praise for successes and encourage parents to role-model	
	desired behaviours.	
	Follow-up care	
PH 53 - Weight	This guideline includes recommendations on:	
management:	•how to adopt an integrated approach to preventing and managing	
lifestyle	obesity	
services for	•awareness-raising among commissioners, nealth and social care	
overweight or	staff and the public	
obese adults	•Improve programme uptake, adherence and outcomes	
IVIAY 2014	•monitoring and evaluation	
	and managing obesity	
	Becommendation 3 Encure convices cause no horm	
	Recommendation 2 Ensure services cause no harm	
	issues among commissioners	
	<b>Becommondation 4</b> Paise awareness of lifectule weight	
	management services among health and social care professionals	
	<b>Recommendation 5</b> Raise awareness of lifectule weight	
	management services among the local population	
	<b>Recommendation 6</b> Refer overweight and obese adults to a lifestyle	
	weight management programme	
	<b>Recommendation 7</b> Address the expectations and information	
	needs of adults thinking about joining a lifestyle weight	
	I needs of addits trinking about joining a mestyle weight	

	management programma	
	<b>Becommendation 8</b> Improve programme untake, adherence and	
	eutromos	
	<b>Becommendation 9</b> Commission programmes that include the core	
	components for effective weight loss	
	Components for effective weight loss	
	sempenents to provent weight regain	
	<b>Percommendation 11</b> Dravide lifestule weight management	
	recommendation II Provide mestyle weight management	
	and to provent weight regain	
	<b>Becommendation 12</b> Broyide a national source of information on	
	effective lifestule weight management programmer	
	<b>Pocommondation 12</b> Ensure contracts for lifestyle weight	
	management programmes include specific outcomes and address	
	local poods	
	<b>Becommendation 14</b> Provide continuing professional development	
	on lifestyle weight management for health and social care	
	Professionals <b>Percentage and senting and continuing professional</b>	
	development for lifestyle weight management programme staff	
	<b>Becommendation 16</b> Improve information sharing on people who	
	attend a lifestyle weight management programme	
	<b>Becommondation 17</b> : Monitor and evaluate programmes	
	Recommendation 17. Monitor and evaluate local provision	
CG/3 Obesity	This guideline covers preventing children, young people and adults	
Prevention	hecoming overweight or obese. It outlines how the NHS local	
Undated	authorities early years' settings schools and workplaces can	
March 2015	increase physical activity levels and make dietary improvements	
	among their target nonulations	
	Public Health recommendations within this document are provided	
	in NG7	
PH46 BMI:	This guideline covers the link between body mass index (BMI) and	
Preventing ill	waist circumference and the risk of disease among adults from black.	
health and	Asian and other minority ethnic groups in the UK. The aim was to	
premature	determine whether lower cut-off points should be used for these	
death in black.	groups as a trigger for lifestyle interventions to prevent conditions	
Asian and	such as diabetes. myocardial infarction or stroke.	
other minority	<b>Recommendation 1:</b> Preventing type 2 diabetes	
ethnic groups	<b>Recommendation 2:</b> BMI assessment: multi-component	
	interventions and best practice standards	
	Recommendation 3: general awareness raising.	
5) What services	/ assets do we have to prevent and meet this need?	
From April 2013.	Public Health in Local Authorities became the responsible commissione	r for obesitv
interventions, loc	ally led nutrition and physical activity initiatives via funding from the Pu	blic Health
Grant.	, ,	

Weight management services are described by NICE (May 2014) as:

**Tier 1**: a universal service which supports people to maintain a healthy weight through education and increasing physical activity via community activities.

**Tier 2**: a more targeted approach looking at changing lifestyle behaviours to encourage long-term weight loss.

**Tier 3**: a specialist weight management service for those who are severely obese which includes psychological support and assessment for bariatric surgery.

**Tier 4**: provision of bariatric surgery to support weight loss in the severely obese.

# **Current Services:**

There is currently one adult Tier 2 weight management programme in Bristol which has been in place since 2009:

• Weight Management on Referral using Slimming World and Weight Watchers

The current Weight Management on Referral scheme is in the process of being reviewed in light of new commissioning guidelines and restructure of Public Health priorities.

In the meantime the Weight Management on Referral scheme will continue to offer a targeted scheme for priority population groups and we will continue to offer a range of physical activity opportunities.

A review of healthy weight initiatives in Bristol shows a wide range of activities available for our residents. These included:

- A Cycling Strategy. This includes plans for a comprehensive cycle infrastructure across the city, standardised maps and signs, ensuring there is adequate parking and options for hire, and provision of cycling training.
- The use of national campaigns such as Change4Life to promote recommendations on reducing screen time and increasing outdoor play. Change4Life is also promoted locally through the Bristol Healthy Schools programme and the National Child Measurement Programme (NCMP).
- Active travel (walking and cycling) which includes a bike loan and exchange scheme, walking groups, walking and cycling maps.
- Playing Out scheme, playgrounds and adult gyms.
- Use of Mode Shift Stars programme and the Living Streets programmes within Bristol schools
- Commissioned leisure centres including the Exercise on Referral Scheme, where GP's can refer people for support to increase their activity through accessing the gym facilities and receiving professional help within the leisure centres.
- 'Walking for health' walks which specifically target people with long term conditions.
- To support workplaces to sign up to the national Workplace Wellbeing Charter which provides guidance to workplaces on enabling healthier lifestyles amongst staff.
- Healthy Eating Projects for specific population groups eg pregnant women, young mums
- Teaching a City to Cook/Cooking from Scratch/Kitchen on Prescription teaching cooking and budgeting skills

- Community Fitness Classes including walking football; Jump fit or for specific population groups
- Sugar Smart Bristol Programme to raise awareness of consumption of sugar and how to reduce intake.
- Bristol Eating Better Award designed to encourage local eating establishments to offer healthier, more sustainable food options and reduce waste and to inform the public.

Tiers 3 & 4 services (Weight Assessment and Management Services) are provided by BNSSG Clinical Commissioning Group.

#### 6) What is on the horizon?

# Bristol City Council's Corporate Plan (2017-2022):

Sets out a direction of travel, with a vision for the city in which all services and opportunities are accessible and where life chances are not determined by wealth and background. To achieve this the corporate plan outlines the way Bristol City Council will conduct its business in the future, including:

- Reshaping services looking at ways of delivering services more efficiently.
- Working closely and collaboratively with partners and communities, joining up services where it is possible.
- Seeing people living and working in Bristol as part of the solution. This will involve communities taking control of their own change, by reducing demand on services where they can, and by taking control of their own issues or changing behaviour.

# Healthy Weight Strategic Action Plan:

This action plan is a city wide approach using partnership working to tackle overweight and obesity across the city. A multi-disciplinary steering group will guide development of new initiatives under the auspices of the Health & Wellbeing Board. It has been recognised that in order to make a difference to this increasing problem, the Local Authority will need to introduce some challenging and innovative programmes across Bristol.

# **National Diabetes Prevention Project**

The roll out of the national Diabetes Prevention Project in Bristol will commence in July 2018. It is a key commitment within our Healthy Weight Strategic plan aiming to reduce the onset of Type 2 diabetes in our population with excess weight.

#### 7) Local views

# What you've told us:

The 1,200 responses from across the city to the Sugar Smart survey provide a relevant snapshot of public opinion. It showed that Bristol citizens want:

- More information on the risks of being overweight and the benefits of a healthy lifestyle.
- For healthy weight to be a priority for Bristol.
- More support for adults and families to cook healthier food, for example through courses on

cooking from scratch and budgeting. They need to be held at convenient times (for example in evenings and on weekends).

- Cooking, budgeting and healthy eating skills to be taught in schools and that they should consider including parents.
- Healthy food and drink options to be more affordable.
- Free drinking water to be easily available.
- To see a reduction in the amount of marketing and advertising of high sugar food and drink.
- More action to be taken in schools to limit sugary items and reduce sugary drink intake among pupils.
- High sugar items to be removed from check-out areas in stores.
- Review food provision in other sectors including hospitals, workplaces and leisure centres
- Improve education around food increasing knowledge, skills and communication about healthy food

The Great Weight Debate (GWD), an event attended by 123 professionals from health, social care, education, mental health, leisure and food industry, private businesses and voluntary sectors made the following recommendations:

We should:

- Promote active travel and physical activity rather than sport
- Take a whole family approach and focus on increasing physical activity of young people, girls and parents
- Concentrate on the food environment and behaviours
- Measure success of new initiatives
- Understand behaviour and set objectives first

In order to have conversations and involve local communities in the Great Weight Debate we need to:

- Take the GWD into communities
- Use of community assets and community development staff
- Community led support
- Work more with councillors

We need to use social prescribing and tackle issues such as funding, patchy coverage, quality assurance, set priorities and have a 4 year plan to support work.

To tackle obesogenic problems within the active environment we need:

- Cross-sector working road maintenance, policy to practice, metro mayor
- Local champions to promote active travel
- Targets for vehicle reduction

To support adult weight management we need to:

• Take a whole person approach

- Have a BNSSG pathway and one stop shop for holistic lifestyle support
- Link with emotional wellbeing and provide psychological support

We need to take small steps to improve the food environment, tackle food deserts and ensure there is good affordable food available to provide seasonal food security.

# B: What does this tell us?

#### 8) Key issues and gaps

A number of gaps have been identified and summarised below:

- An integrated Tier 1, 2 and 3 obesity prevention and weight management pathway is in place. Tiers 1 and 2 in Bristol are led by Public Health; Tiers 3 & 4 are led by BNSSG Clinical Commissioning Group across the three areas. Demand for the service is high and there is currently a waiting list to access Tier 3 services.
- 1. Access to healthy lifestyle support is not consistent across Bristol. There is some availability in the community to promote and develop cooking skills, improve knowledge of healthy eating, skills in growing food and increasing physical activity but they do not always engage the whole family and vary in their quality and comprehensiveness.
- 2. There are very few services that support people to reduce stress or look at self-esteem and emotional wellbeing which could be an essential factor in changing other negative lifestyles.
- 3. Training for professionals and promotion of weight management is limited and many professionals are concerned about 'raising the issue of weight'.
- 4. More partnership working is required to promote healthy weight, particularly across BCC departments such as leisure, planning and public health; between service providers such as health trainers and weight management; and across organisations such as the NHS, schools, the voluntary sector and BCC.
- 5. Links to other pathways need to be stronger, eg Tier 3 weight management programme, Social Prescribing, and Type 2 Diabetes prevention programme
- 6. More emphasis needs to be given to prevention and early intervention of overweight and obesity through improving understanding of the importance of good nutrition and physical activity and increasing resources and accessibility for these.
- 7. More emphasis made on the impact of food outlets/takeaways supporting healthier food offers in place of the cheap food offers currently available.
- 8. Very little use of digital information including apps and online services. These will not be suitable for all population groups, but may better serve some specific population groups that currently barely access services, eg men, adolescents and young people.

# 9) Knowledge gaps

# Local Gaps

- 1. Local data on ethnicity and disability
- 2. Local data on excess weight with borderline type 2 diabetes and type 2 diabetes

- 3. Outcome data from Tier 3 and 4 services
- 4. Maternity BMI data
- 5. Data from hospital admissions and elective surgery admissions related to BMI

# **Evidence around interventions**

Further evidence required on interventions aimed at groups at community and population level – rather than evidence on interventions directed at the individual

# C: What should we do next?

# 10) Recommendations for consideration

- 1. Take a City wide approach to tackling obesity, taking the learning from cities where population excess weight is in decline, for example, Amsterdam
- 2. Promote and develop cooking skills, improve knowledge of healthy eating, skills in growing food and increasing physical activity engaging the whole family.
- 3. Ensure services support people to reduce stress and increase self-esteem and emotional wellbeing to assist with weight loss.
- 4. Provide support for health professionals and work places to identify and address the issue of weight.
- 5. Improve partnership working to promote healthy weight
- 6. Improve links to other pathways including the Tiers 3 & 4 weight management programmes, Social Prescribing, and Type 2 Diabetes prevention programme
- 7. More emphasis needs to be given to prevention and early intervention of overweight and obesity through improving understanding of the importance of good nutrition and physical activity and increasing resources and accessibility for these.
- 8. Increase the number of health promotion programmes that focus on one particular issue, making messages easier to understand and follow, eg Sugar Smart Bristol
- 9. Increase opportunities to introducing healthier and more sustainable food into public places and key institutions/businesses in the city.
- 10. Take action to improve the food offer in food outlets/takeaways.
- 11. Make better use of digital information including apps and online services.
- 12. Better links need to be made between weight management services and those dealing with Type 2 diabetes and the National Diabetes Prevention Programme.

# 11) Key contacts

Key commissioning/strategic group who own the chapter

# Healthy Weight Group:

Chair – Becky Pollard, DPH

Consultant Lead – Sally Hogg

Lead – Wendy Parker, PH Principal

Councillor Asher Craig

Councillor Gill Kirk Councillor Celia Phipps Dr Kirsty Alexander – CCG Lead Bristol JSNA process – website: <u>www.bristol.gov.uk/jsna</u> / email: <u>jsna@bristol.gov.uk</u>

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