Eat Well Move More Shape Up

Blackburn with Darwen's Food Physical Activity and Healthy Weight Strategy

2017 – 2020

BLACKBURN with DARWEN
BOROUGH COUNCIL

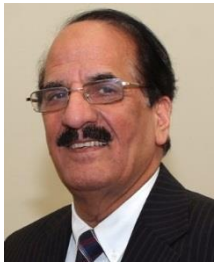
Contents

Foreword

The food we eat and the how physically active we are, is influenced by many complex factors, and not simply our lifestyle choices or genetics. The environment in which we live, grow, learn, work, play and age directly affects our food choices and, our levels of activity. For most of us, our attitudes, behaviours and lifestyle choices are affected by how much money we have or, what is available locally. Society influencers such as the media, education, peer pressure or culture have powerful effects on our individual, and family, choices. In addition, local, national and global policies can positively or negatively contribute to our individual health and wellbeing.

The impact of a continued unbalanced diet and inactive lifestyle over the life course has many negative health and wellbeing consequences, such as obesity, diabetes, cardiovascular disease, some cancers, and poor mental health and wellbeing. Not only does this affect our life style directly, but the cost of treating these health conditions is now beyond what we can afford. Therefore, we need to increase the focus on primary prevention and early intervention, to support and empower individuals and communities by making the healthier choices easier, and to enable us to keep happy, healthy and well and most importantly to prevent such diseases from developing. This 'Eat Well, Move More and Shape Up' strategy is the first comprehensive local strategy of its kind to encompass the three strategic aims around (i) food and nutrition, (ii) physical activity and (iii) healthy weight. This cross cutting strategy provides a call to action not just to our usual health and wellbeing partners, but to local businesses small, medium and large, who have a key role to play in developing the choice architecture available to both customers and their employees. We know that if we have a healthy workforce, then we have a more productive workforce.

We fully endorse and recommend this strategy to **ALL** of our partners, as these aims can only be achieved by the combined efforts of many. We encourage each partner to take a leadership role in creating this change within their sphere of influence. As individuals, we need to lead by example and create a new healthier 'norm', and engage local residents to create a more active and healthier environment to live, work and play.



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Executive Summary

Our Vision:

'For everyone in Blackburn with Darwen to move more, eat well and maintain a healthy weight'

There is a growing body of evidence about the negative effects of obesity, physical inactivity and poor diet on the physical and mental health and wellbeing of individuals along with the economic costs to society. Some might argue that eating healthily and being physically active is a choice which is taken by the individual and cannot be influenced by an external force. However, we know that due to the inequalities which exist in society and many other factors including the power of junk food marketing, increasing mechanisation and the austerity measures put in place by the current UK Government, those choices are being taken away.

With the majority of the population currently overweight or obese, social norms are shifting. Challenging this 'new norm' will require national action with support from local government, greater awareness in recognising the fragility of the health care system and community education to generate a social movement for a health and self-care.

Blackburn with Darwen is one of the most deprived Boroughs in the country and with that comes huge challenges in health and wellbeing. Around 75,000 adults in the borough are overweight or obese and the rate of obesity more than doubles from 9.4% at 4-5 year old to 22.1% at 10-11 year old. Over 50,000 adults in Blackburn with Darwen are not active enough to benefit their health with the cost of physical inactivity to the Borough being over £3 million. Dental health in the Borough is also very poor with 3 year olds have almost double the national average dental decay and 5 year olds have the worst dental health in the country.

Drawing on the recommendations from national insight work and physical activity, obesity and food strategies and extensive local consultation, a detailed action plan which takes a life course approach will support this strategy. Whilst it is acknowledged that services and interventions are important in tackling the issues identified in the strategy, there must be a focus on coordinated, strategic action ensuring health in all policies and strong, local authority and health leadership.

Working together to tackle health inequalities in Blackburn with Darwen is a focus of this strategy. To support some of the most vulnerable groups in our communities, even in these times of financial pressure, we will be taking a whole systems approach to tackling obesity and physical inactivity. It is in engaging with all partners and stakeholders, including council and health leaders, Community, Voluntary and Faith sector organisations, the wider public sector, private business and local communities themselves; the strategy demonstrates a joint commitment to work together to have prevention as a priority in all that we do that we can make a significant difference to the health and wellbeing of the residents of Blackburn with Darwen.

Overall Strategy Mission

- Support an environment that empowers people to make physical activity and healthy eating the easy choice for everyone throughout the course of their lives
- Encourage positive lifestyle changes that enable the people of Blackburn with Darwen to improve their health and wellbeing and to be a healthy weight
- Empower the most vulnerable and at risk of poor health in our community to make positive behaviour changes
- Building community capacity and mobilising the workforce of Blackburn with Darwen to make every contact count

Introduction

Eat Well

For Blackburn with Darwen to be a place:

- Where everyone can access healthy, affordable, good quality food and enjoy a healthy diet
- Where the food in the borough is produced and sourced locally which in-turn supports the local economy and helps sustain the environment
- Where food is used to bring the community together celebrating different food cultures and promoting cohesion through food.

Eat Well Aims

1 Promote healthy and sustainable food choices for all

2 Tackle food poverty and diet related ill-health across the life course

3 Build community food knowledge, skills and resources

4 Promote a vibrant diverse local food economy

5 Transform catering and food procurement

6 Reduce waste and the ecological footprint of the food system

Move More

To increase the levels of physical activity across the life course for all residents in Blackburn with Darwen through greater partnership and collaborative working:

Move More Aims

1. Active society: creating a social movement where physical activity is a priority for everyone
2. Moving professionals: activating networks to create active healthy workplaces and make every contact count to promote physical activity
3. Active environments: creating the right spaces for safe and enjoyable physical activity
4. Moving at scale: maximising the potential of the existing assets and build on existing evidence base on what works to make us active

Shape Up

Promote an environment which positively encourages residents to achieve a healthy weight through making healthy lifestyle choices by:

Shape Up Aims

1. Transforming the environment we live in
2. Making healthier choices easier by educating and empowering individuals and communities
3. Giving all children the best start and tackling the generational issue of healthy weight in families
4. Ensuring holistic and integrated evidence based support for individuals with weight related conditions – either under or overweight

Key Drivers

NHS 5 Year Forward View 2014

Get Well Soon – Place Based Health 2016

Healthier Lancashire Programme

Cumbria & Lancashire Sport & Physical Activity Strategy

Lancashire Walking & Cycling Strategy

Everybody Active Every Day

Childhood Obesity: A Plan for Action

Sporting Futures

Towards an Active Nation

UK Active's Blueprint for an Active Nation

Governance

The Eat Well, Move More, Shape Up strategy will be accountable to the Blackburn with Darwen Health & Well Being Board and will be the responsibility pf the Eat Well, Shape Up, Move More steering group which is chaired by a representative from Public Health to ensure the development of the strategy. As the strategy develops, members of the groups will engage and liaise with their organisation, community and peers to ensure wide cascade and ownership of the action points within the strategy. Membership of this group comprises key partners and stakeholders, as outlined in appendix i.

The strategy will:

- raise the profile of physical activity opportunities and the benefits of increased participation amongst the population
- identify a number of key principles to increasing participation in physical activity
- coordinate, inform and influence the way in which individuals and organisations work
- Strategically influence the development of intervention programmes to increase physical activity levels, reduce obesity levels and encourage and promote healthy food choice within key target groups to address health inequalities

2. Food

Food is essential for life and can have an impact that is both positive and/or negative, depending on the type of food we eat. Food helps meet our physical needs by providing us with energy and nutrients but for many people it can also meet social, cultural and emotional needs. However, increasingly, we see the food system being challenged both domestically and globally.

A healthy diet is defined by the World Health Organisation as achieving energy balance, limiting energy intake from total fats, free sugars and salt and increasing consumption of fruits and vegetables, legumes, whole grains and nuts. Evidence shows that the environments in which people develop their dietary behaviour and make their food choices significantly influence what they purchase and, in turn, what they eat. [1]

Furthermore, significant differences in nutritional knowledge have been linked to different socioeconomic groups, with knowledge declining with lower socioeconomic status. For example, children who live in the most deprived areas are at an increased risk of adult cardiovascular disease, partly reflecting lower exposure to healthy foods. This learned behaviour can then reinforce adult food preferences for less healthy foods.

A recent review on interventions to promote healthy eating[2] found that lower socioeconomic position is associated with a higher intake of energy dense, nutrient poor foods high in saturated fat and sugar, and with lower intake of fruit, vegetables and whole grains. Food selection is not only a behavioural choice but can also be influenced by factors such as cost, access and knowledge.

2.1 Health and Wellbeing

Recent data shows that diet has overtaken tobacco in having the greatest impact on health in the UK[3]. Unhealthy diets are attributed to a number of health conditions which in-turn have a massive burden on health and social care institutions.

Insight from the findings of the National Diet and Nutrition Survey provides an indication of the diet, nutritional intake and the nutritional status of the general population in the UK. The key findings of the survey from 2008/2009 – 2011/2012 shows that the UK population is consuming too much saturated fat, added sugars and salt, and not enough fruit, vegetables, fibre and oily fish.[4]

Nationally, the government's '5 a Day' programme has continually highlighted the importance of including fruit and vegetables in the diet. A preventative strategy; it is aimed at improving diet and nutrition in the general population. Current guidelines recommend that adults and children should aim to eat at least five portions of a variety of fruit and vegetables each day. Fruit and vegetables may also play a key role in weight management when combined with a reduction in fat intake, may reduce the risk of developing Type 2 diabetes and impaired cognitive function.

The 2013 Health Survey for England found that higher consumption was also associated with higher income, and vice versa. 30% of men and 35% of women in the highest income quintile had consumed five or more portions on the previous day compared with only 19% of men and 23% of women in the lowest quintile. This same pattern is repeated for children.[5]

As a nation we are eating too much sugar and it is bad for our health. Consuming too many foods and drinks high in sugar can lead to weight gain[6] and health related problems,[7] as well as tooth decay.[8] Sugar intake of all population groups are above the recommendations contributing to around 12 to 15% of energy intake.[4] Consumption of sugar and sugar sweetened drinks is particularly high in school age children and it also tends to be highest among the most deprived communities who also experience a higher prevalence of tooth decay and obesity and its health consequences.[9] [10]

The World Health Organisation[1] attributes unhealthy diets and physical inactivity to the significant rise in obesity and one of the leading causes of non-communicable diseases including cardiovascular disease, type 2 diabetes and certain cancers. Consuming a healthy diet is essential to help prevent the aforementioned long term conditions.

2.2 Breastfeeding

Earlier this year new research was published in the Lancet confirming that breastfeeding saves lives, improves health and cuts healthcare costs in every country, including the UK. [11] Yet despite the overwhelming evidence, the UK has some of the lowest breastfeeding rates in the world with initiation rates in England of 74.3% (Figure 1).[12] There are social, cultural and economic barriers which mean that many women are unable to breastfeed successfully despite genuine efforts to do so. This can lead to women experiencing feelings of pain, guilt and anger.

The evidence is well-established, for both the benefits to mother and baby of breastfeeding, and the significant risks of not breastfeeding. Breastfeeding has some of the most wide-reaching and long lasting effects on your baby's health and development.

Babies who breastfeed at a lower risk of [11 13 14]

- Gastroenteritis
- Respiratory infections
- Sudden infant death syndrome
- Obesity
- Type 1 & 2 diabetes
- Allergies (e.g. asthma, lactose intolerance)

Breastfeeding is associated with a higher IQ, translating into improved academic performance, as well as increased long-term earnings and productivity. Emerging evidence suggests that breastfeeding has a positive impact on mother-baby relationships: breastfeeding releases certain hormones which promote maternal feelings and behaviour. Strong early relationships and a stable and loving environment are all conducive to babies' healthy emotional, social and physical development, through production of the hormone oxytocin. Oxytocin acts like a fertiliser for the brain, promoting the growth of neurons (brain cells) and the connections between them, enabling babies to grow into secure, happy children. [15 16]

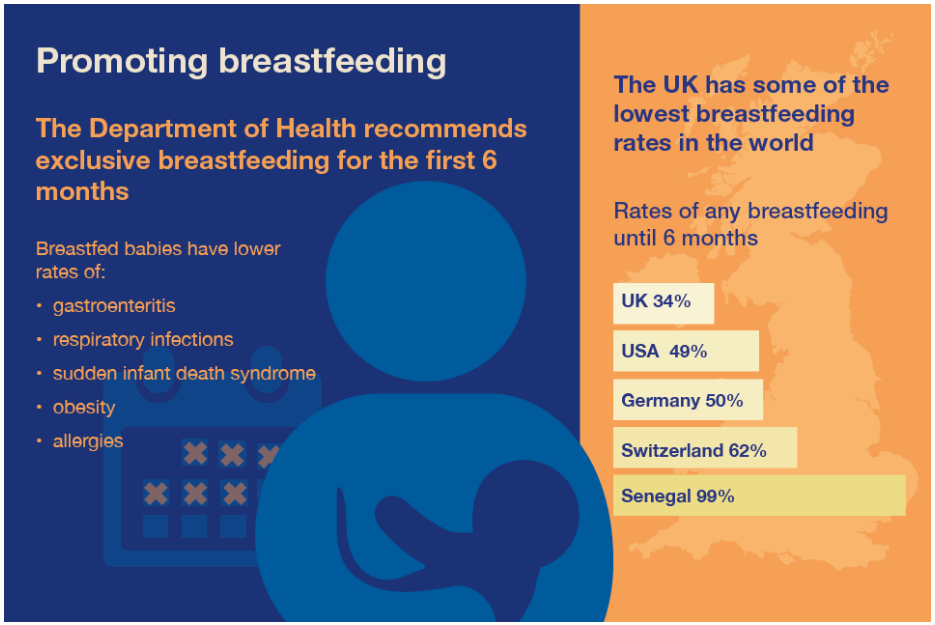

Figure 1. Health matters: giving every child the best start in life - promoting breatfeeding. (Public Health England, 2016).

2.3 Food Sustainability, the Environment and Food Waste

The Food and Agriculture Organisation[17] describes a sustainable diet as

> '..those diets with low environmental impacts which contribute to food and nutrition security and to a healthy lifestyle for future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable, nutritionally adequate, safe and healthy; while optimising natural and human resources' (FAO, 2012)

According to the Sustain website[18] their definition of what equates to 'good food' is that it should be produced, processed, distributed and disposed of in ways that:

- *'Contribute to thriving local economies and sustainable livelihoods - both in the UK and, in the case of imported products, in producer countries;'*
- *'Protect the diversity of both plants and animals and the welfare of farmed and wild species'*
- *'Avoid damaging or wasting natural resources or contributing to climate change;'*
- *'Provide social benefits, such as good quality food, safe and healthy products, and educational opportunities'.*

More than 70% of the population lives in urban areas in Europe, a number that is likely to increase in the forthcoming years.[19] It is taken for granted that everyday food will arrive at restaurants, shops, supermarkets, schools, etc. across our towns and cities – enough to meet the health and diverse cultural needs of the population. However, there is evidence to suggest that our food system is vulnerable which could lead to reduced access and availability of food.

Dependence of the food system on fossil fuels is one of many examples of negative environmental impact of our diets. From production to consumption; our food system emissions contribute to 30% of global greenhouse gas emissions.[20] The UK imports approximately 47% of total food products which adversely contribute to carbon emissions associated with food transportation, refrigeration and packaging.[21]

Alongside climate change, biodiversity, depletion of natural resources, food waste, and food packaging all have considerable impact on the environmental. According to the 'Love Food, Hate Waste' website, approximately 7 million tonnes of food and drink is thrown away from our homes; the majority of which could have been eaten. This equates to £12.5bn a year at an average cost of £470 a year per household, rising to approximately £700 for a family with children. Reducing this unnecessary food waste can have a positive impact on the environment and would be the equivalent of taking 1 in 4 cars off the road.

Food waste is further exacerbated by lack of understanding of food labels. Whilst foods that have passed their 'use by' date should never be eaten, 'best

before' dates refer to quality rather than food safety and are therefore are usually safe to eat. Limitations and lack of understanding of food labelling, may be leading to some shoppers disposing of food that is still fit for consumption.

2.4 Food Poverty

In recent years, food poverty has been highlighted as a growing problem which has "all the signs of a public health emergency that could go unrecognised until it's too late to take preventative action".[22] Use of emergency food aid in the UK, particularly in the form of food banks, has dramatically increased over the last decade.[23]

The Department of Health recognises food poverty as "the inability to afford, or to have access to, food to make up a healthy diet.[24] In November 2014, the Church of England, Oxfam UK, Child Poverty Action Group and the Trussell Trust published a report on understanding and reducing the use of food banks in the UK – 'Emergency Use Only'.[25] Participants in the research reported that food bank use was primarily in response to a financial crisis which had resulted in no money for food.

It is widely reported that individuals and families who experience food poverty are more likely to eat a diet which is unhealthy; characterised by food that is higher in saturated fat, salt and sugar. Furthermore, they are more likely to eat processed foods which are both cheap and energy dense.

The UK Faculty of Public Health response to the All Party Parliamentary Inquiry into Hunger and Food Poverty in Britain[26] acknowledged that the reasons for inequalities in the UK are complex and many individuals and families in the UK are living in poverty which in turn impacts their ability to afford a nutritious diet.

Food prices in the UK have risen by 12% in real terms since 2007.[21] Yet, in the same period, UK workers have suffered a 7.6% fall in real wages.[27] The recent 'Brexit' referendum may bring additional volatility to the food market with examples of suppliers increasing food prices further exacerbating the issue of food poverty. With low wages and the high cost of food, many vulnerable individuals and families will find it increasingly difficult to afford food to meet their most basic nutritional needs.

2.5 Accessibility and Availability of Affordable Food

The following groups are people are at increased risk of experiencing food poverty:[28]

- people living on low incomes or who are unemployed
- households with dependent children
- older people
- people with disabilities
- members of black and minority ethnic communities

Poor accessibility to affordable healthy foods, linked to a number of factors makes people already vulnerable more susceptible to experiencing food poverty. Factors such as closure of shops in deprived areas, out-of-town supermarket developments, poor transport links etc. all contribute to poor access and affordability of healthy food.

Food supply and access to food are highlighted as two key factors which ensure food security.[29] Figure 2 below includes the various determinant of food security.

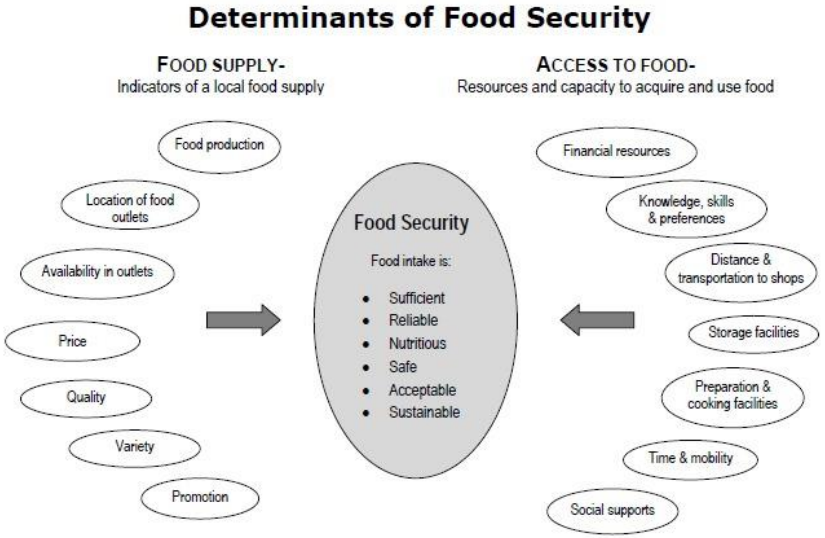

Figure 2 Determinants of Food Security. (Adapted from Rychetnik 2003)

All components in the food system are required to ensure community food security. A whole system approach with the right amount of resources and capacity are required to ensure a good quality food supply.[30]

2.6 Food Procurement

The public sector spends about £2.4bn per annum procuring food and catering services. This represents approximately 5.5% of UK food service sector sales. Schools, hospitals, armed forces, central and local government, government agencies, prisons and courts to name a few, are recipients of these monies. Food procured for these institutions can significantly affect the health, wellbeing and eating habits of the people using them making it vitally important that food procurement for the public sector is not only value for money, but also helps in making wider impacts.[31] The 2015-2020 Sustain Better food Better farming Better lives Strategy[32] details the need for strengthening public sector standards for food and to ensure public money is invested in wider social, economic and environmental benefits, ensuring that all public sector settings are serving healthy, sustainable diets.

The DEFRA report written by Dr Peter Bonfield[31] highlights how effective public procurement can deliver a range of benefits. It can support a thriving local economy and also supply quality nutritious food for its customers. It can also help in:

- *Supporting farmers and food producers and rightly rewarding them for operating to high animal welfare and production standards;*
- *Building training opportunities into contracts, to ensure a well-skilled food and farming sector for the future;*
- *Tackling health issues by enabling people to eat well across the public sector, including in our hospitals, and contributing to wider societal wellbeing;*

• *Helping our school children to value their food by knowing where their food comes from, and how to cook healthy meals.*

2.7 Food culture, education and skills

In the UK we have lived through a food revolution in recent years. Cooking features heavily on prime time television and chefs have become celebrities with some able to influence and improve food policy. Our shops and supermarkets offer a much wider range of products than ever before and reflect a demand for ingredients to meet a much more developed sense of taste and interest in a range of cuisines. We have moved on from the austere times of post war food rationing and food lacking in flavour and enjoyment and more people want to understand where their food comes from, how it was produced and who produced it. However for many, food that would have been made from scratch has been replaced with a ready meal or fast food. Still too many children do not know where their food comes from and lack the basic cooking skills required to create a meal from scratch. Where once families ate together many do not even have a dining table whilst in most workplaces, the lunch break has been replaced by a rushed sandwich sat at the desk with food being used for fuel and not being enjoyed.

The food system across Lancashire offers an array of opportunities for creating jobs, increasing economic prosperity and improving the wellbeing of the entire community that reside and work within the County and promote food sustainability. Boosting local food production and local food networks will bring food growers and suppliers closer to the communities they serve and potentially reap sustainable economic and environmental benefits for all residents. Connecting urban consumers with the local farmers in and around Blackburn with Darwen will help develop a deeper understanding of the value of food and its relationship to our health and the environment. Reducing 'food miles' by developing more localised food networks will also help reduce the greenhouse gas emissions and in the long-term improve air quality and the impact on the environment and our health.

2.8 What is a Healthy Diet?

A healthy, balanced diet consists of a variety of foods. This includes at least five portions of fruit and vegetables a day; starchy foods, in particular wholegrains, such as bread, pasta and rice; protein-rich foods such as meat, fish, eggs and lentils, dairy foods and limited amounts of food containing high fat, salt and sugar. A diet full of variety of foods is important but so is portion control. Eating the right amount in relation to the level of physical activity a person does each day can help control weight and subsequently reduce the risk of diet related diseases.

Figure 3 Eat Well Guide (Public Health England, 2016)

The components of a healthy diet are best shown by the 'Eatwell Guide' (Figure 3). The Eatwell Guide is described by Public Health England as a resource that:

> '….shows the proportions in which different types of foods are needed to have a well-balanced and healthy diet.'

This includes everything that is eaten throughout the day and applies to different sub-groups of the population taking into consideration everyone (except under 2 year olds due to their differing nutritional needs) and acknowledging people eat different diets due to religious, cultural reasons and/or lifestyles. Dietary requirements also change or are advised to be modified dependant on life-stage from preconception and pregnancy through to older people.

2.9 Key Documents

Better food. Better farming. Better lives. Sustain Strategy 2015-2020, 2015

Sustainable Development Commission, 2011

The Green Food Project Conclusions; Defra, July 2012

Sustainable Consumption Report: Follow-up to the Green Food Project; Defra, July 2013

The Foresight report 'Tackling Obesities: Future Choices', 2007

'Healthy Lives, Healthy People', Public Health White paper, 2010

'Healthy Lives, Healthy People: A call to action on obesity in England', 2011

A Plan for Public Procurement, Defra, 2014

3. Physical Activity

3.1 Introduction

'Physical inactivity is described as doing no or very little physical activity at work, at home, for transport or during discretionary time and not reaching physical activity guidelines deemed necessary to benefit public health'[33]

Physical inactivity is known to be the fourth leading cause of global mortality. Many of the leading causes of ill health in society today such as coronary heart disease, cancer and type 2 diabetes, could be prevented if more inactive people were to become active.[34] Physical inactivity is one of the leading causes of death in developed countries, responsible for an estimated 22-23% cases of coronary heart disease, 16-17% of colon cancer, 15% of diabetes, 12-13% of strokes and 11% of breast cancer cases.[35] Evidence also continues to mount that the best way to prevent dementia is to follow the general guidelines for a healthy lifestyle.[36] A study at Cambridge University[37] has concluded that around 30% of cases of Alzheimer's disease may be attributable to seven risk factors including a healthy diet but both papers agree that the most important factor is physical activity. Alongside reducing premature death and the incidence of disease, being physically active has benefits for mental health, quality of life and wellbeing and maintaining independent living in older age. Being active plays a key role in brain development in early childhood[38] [39]and is also good for longer-term educational attainment.[40] Increased energy levels boost workplace productivity and reduce sickness absence. An active population can even reduce levels of crime and antisocial behaviour.[41]

Figure 4 Physical activity as a drug (Sport England)

Physical activity can help to play a role in reducing health and social inequalities[42] and as a result of its wide reaching impact has been described as the 'best buy' in public health.[43] An analysis of the Global Burden of Diseases, Injuries and Risk Factors Study[44] found physical inactivity and low physical activity to be among the ten most important risk factors in England. Physical inactivity places a significant burden on the healthcare system and

the economy and in 2013/14 physical inactivity was found to cost the NHS Clinical Commissioning Groups £455million.[45] Furthermore, ill-health of working age individuals (aged 16-64) can cost the government between £62 and £72 billion and have a total economic impact of £103 to £129 billion each year.[46] In 2010 the CMO for England called for a doubling of walking and an eight-fold increase in cycling.[47] A study by public health economists found that within 20 years this increase would lead to savings of roughly £17 billion (in 2010 prices) for the NHS in England and Wales.[48]

Despite the well reported health and economic benefits of physical activity, levels of participation in the UK are currently very low in both children and adults with 66% of men and 54% of women in the UK claiming to meet the recommended guidelines and 21% and 16% of girls aged 5-15 in England take the physical activity they need for good development (Figure 5).[49] As a population we are 24% less active than in 1961 and if current trends continue, we will be 35% less active by 2030.[50]

Physical activity levels decline rapidly with increasing age. 11% of men in the age 25-34 age group are classified as physically inactive and this figured quadruples to 46% in the 75+ age group. There is a similar picture for women are inactive where levels of physical inactivity treble in the 75+ age group. In the North West region numbers meeting recommended guidelines are lower than the national avenue at 59% for men and 48% for women. There are also stark differences in inactivity levels between the highest and lowest income quintiles with almost double the number of inactive women (34%) and treble the number of inactive men (29%) from the lowest income quintile.[49]

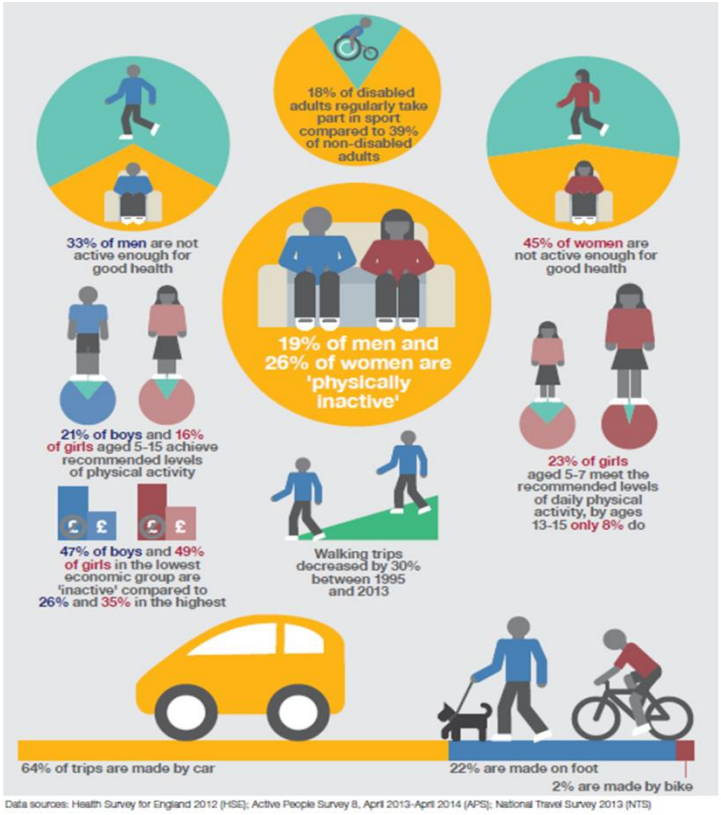

Figure 5 Physical Inactivity Infographic (Data source: Active People Survey 2013-2014, National Travel Survey 2013, Health Survey for England, 2012)

A number of studies have shown low levels of physical activity among minority ethnic groups in the UK. This is particularly true for South Asian populations[51] where markedly lower levels of physical activity compared to the White population have been found to remain significant even after

controlling for age, sex, education, adiposity and self-reported health variations.[52] Further analysis of separate South Asian groups suggests that people from the Bangladeshi community have markedly lower levels of physical activity than other South Asian groups.[53] More recent statistics from the BHF showed only 26% of Bangladeshi men and 11% of Bangladeshi women meet the recommended levels.[54]

'Sedentary behaviour is not defined simply as a lack of physical activity. It is a group of behaviours that occur whilst sitting or lying down and that require very low energy expenditure. The low energy requirements distinguish sedentary behaviours from other activities that also occur while sitting down, but which require greater effort' [55]

There is a growing body of evidence linking sedentary behaviour with chronic disease morbidity and mortality in adults[56] [57] [58] [59] [60] [61] and early evidence to suggest sedentary behaviour may also be a health risk in children and young people.[62] [63] [64]Sedentary behaviour damages health because of the way it affects circulation and fails to use muscles and bones. Guidelines now recommend that people of all ages should avoid prolonged periods of sedentary behaviour and break up periods of sitting.[65] Sedentary behaviour is on the increase in the UK with more adults inactive on weekend days than week days with this pattern even more evident in children and more than 40% of women and 35% of men spend more than six hours a day desk-bound or sitting still and applies across the life course.[66] Sedentary behaviour is more prevalent with increasing age, with evidence of a marked increase from approximately 60 years of age onwards.[67] Children who tend to be more sedentary have a good chance of continuing to be sedentary as adolescents. This suggests sedentary habits developed early in life tend to be relatively unchanging over time. Even individuals who meet current physical activity guidelines may be at risk of the adverse effects associated with prolonged periods of sedentary behaviour[68] therefore there are key messages that need to be communicated even to those who meet the minimum physical activity guidelines.

3.2 Physical Activity and Obesity

The risks to health with weight gain are the same as being physically inactive, weight gain during adulthood can also increase the risk of heart disease, diabetes, and other chronic conditions. Since it's so hard for people to lose weight and keep it off, it's better to prevent weight gain in the first place. Encouragingly, there's strong evidence that staying active can help people slow down or stave off "middle-age spread".[69] The more active people are, the more likely they are to keep their weight steady;[70] [71] the more sedentary, the more likely they are to gain weight over time.[72]

3.3 How Does Activity Prevent Obesity?

Researchers believe that physical activity prevents obesity in multiple ways:[73]

- Physical activity increases people's total energy expenditure, which can help them stay in energy balance or even lose weight, as long as they don't eat more to compensate for the extra calories they burn.

- Physical activity decreases fat around the waist and total body fat, slowing the development of abdominal obesity.
- Weight lifting, push-ups, and other muscle-strengthening activities build muscle mass, increasing the energy that the body burns throughout the day—even when it's at rest—and making it easier to control weight.
- Physical activity reduces depression and anxiety,[74] and this mood boost may motivate people to stick with their exercise regimens over time.

Exercise can help promote weight loss, but it seems to work best when combined with a lower calorie eating plan.[75] If people don't curb their calories, however, they likely need to exercise for long periods of time—or at a high intensity—to lose weight.[76] [77]

Weight loss is best achieved by combining changes in eating habits with increased amounts of physical activity. Physical activity is thought to be more effective in the prevention of overweight and obesity than in its treatment. Yet, results from a European survey suggest that people perceive food to be far more important in preventing weight gain than physical activity. Similarly, when asked about the most important influences on health, nutrition ranked much higher than physical activity.[78]

It is important to keep in mind that staying active is not purely an individual choice: The so-called "built environment"—buildings, neighborhoods, transportation systems, and other human-made elements of the landscape—can influence how active people are.[79] People are more prone to be active if they live near parks or playgrounds, near open spaces and in areas with good links to cycle paths and safe pavements, or close enough to work, school, or shopping to safely travel by bicycle or on foot.[80]

There is a correlation between being overweight or obese and being physically inactive. The HSE report published in 2008[81] show self-reported activity levels by BMI category. Both men and women who were overweight or obese were less likely to meet the recommendations compared with men and women who were not overweight or obese. Given these findings, it is not surprising that obese men and women had the highest rates of low activity (36 per cent and 46 per cent respectively). Those who were not overweight or obese spent fewer minutes on average in sedentary time (591 minutes for men, 577 minutes for women) than those who were obese (612 minutes for men, 585 minutes for women). Young people who are overweight or obese tend to have lower participation sport and physical activity[82] and if we are to tackle the obesity epidemic and prevent it escalating further there needs to be consideration in changing attitudes to physical activity and making it an enjoyable and social experience for young and old alike.

3.4 What is physical activity?

'Physical activity is described as any body movement produced by the skeletal muscles that results in a substantial increase over resting energy expenditure'[83]

This strategy is focusing on physical activity in its broadest sense; and how we can embed physical activity into our everyday lives to make more people across the life course physically active. There are many definitions of physical activity which encompasses sport, active living and active recreation:

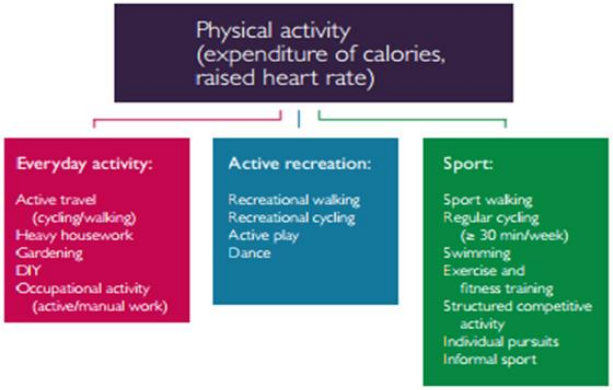

Figure 6 Definition of Physical Activity (Department of Health, 2011)

Physical activity does not need to be strenuous to be effective. Thirty minutes a day of moderate aerobic activity can be a brisk walk, a swim, or even a spell of gardening. Each ten-minute bout that gets the heart rate up has a health benefit. Although sport can be part of the picture, activity can also be more informal. Fitness does not have to be a 'regime' and everyday activity such as walking or cycling to the shops or to work can be a great way to reach the minimum recommended physical activity levels. The key to achieving and maintaining the recommended physical activity levels is to build it into everyday life and when choosing leisure based activity to ensure it is enjoyable for the individual. In doing this the physical activity can become habitual and embedded in daily routines.

3.5 What is Sedentary Behaviour?

A sedentary individual is different from someone who is considered inactive. Inactive can be used to describe those who are active but not sufficiently to meet the physical activity guidelines. For instance an adult who completes the recommended 150 minutes per week of moderate physical activity can still be considered sedentary if they spend a large amount of time seated, for example, at their desk at work and a child who accumulates at least 60 minutes per day of moderate physical activity can still be considered sedentary if they spend a great deal of their time sitting or lying down, e.g., playing video games or sitting in a car or buggy.

3.6 So How Much is Enough?

Start Active Stay Active[65] details the Chief Medical Officers of the UK's guidelines for physical activity from cradle to grave which allow for greater flexibility for achieving the recommended levels of physical activity and also includes new guidelines on sedentary behaviour.

Physical activity guidelines for the under fives

- Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.
- Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.
- All under-fives should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

Physical activity guidelines for children and young people (Figure 7)

- All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day.
- Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.
- All children and young people should minimise the amount of time spent being sedentary (sitting) for extended periods.

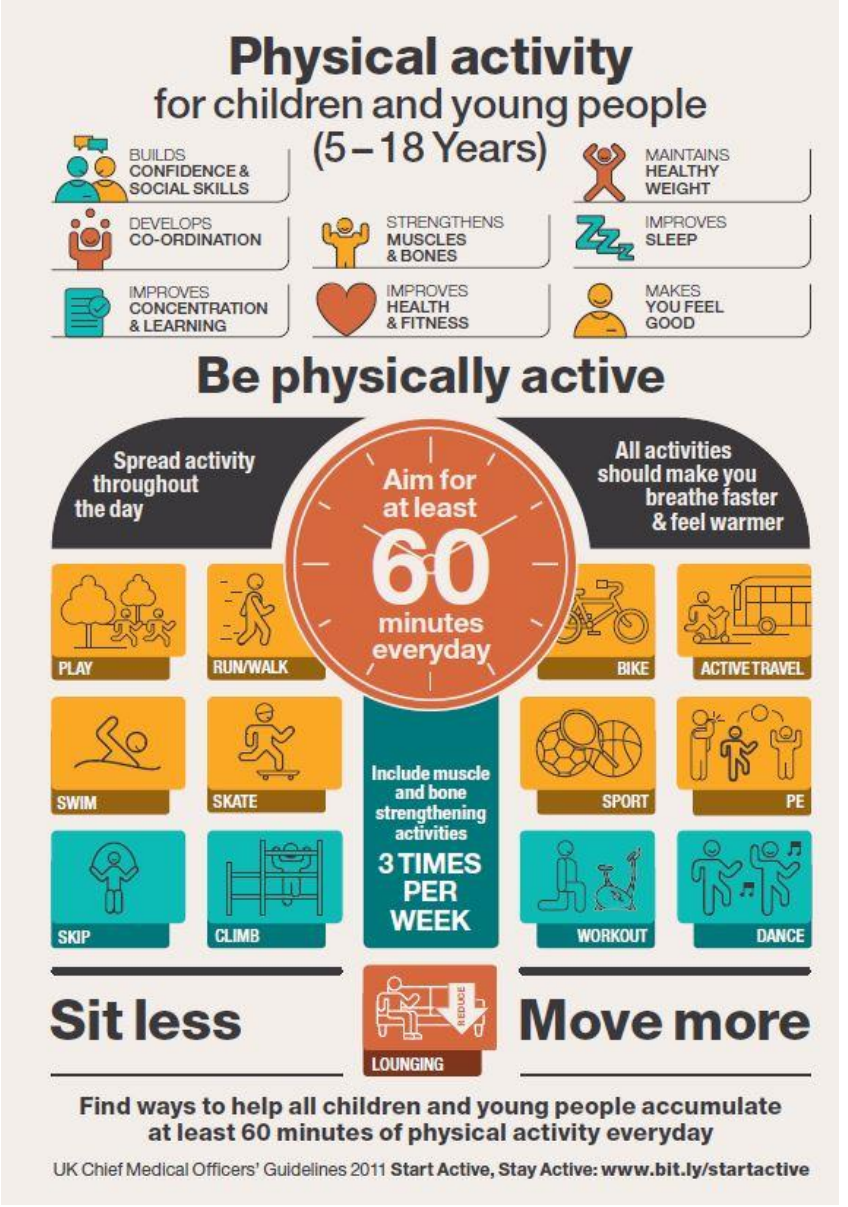

Figure 7 Children and Young People's Physical Activity Infographic (Department of Health, 2016)

Physical activity guidelines for adults (Figure 8)

- Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
- Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous intensity activity.
- Adults should also undertake physical activity to improve muscle strength on at least two days a week.
- All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Physical activity guidelines for older adults (Figure 8)

- Older adults who participate in any amount of physical activity gain some health benefits, including maintenance of good physical and cognitive function. Some physical activity is better than none, and more physical activity provides greater health benefits.
- Older adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
- For those who are already regularly active at moderate intensity, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous activity.
- Older adults should also undertake physical activity to improve muscle strength on at least two days a week.
- Older adults at risk of falls should incorporate physical activity to improve balance and co-ordination on at least two days a week.
- All older adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Figure 8 Physical activity guidelines for adults and older adults (Department of Health, 2016)

3.7 Active Travel

Promoting active travel can impact significantly on public health in terms of increasing physical activity, reducing obesity, reducing pollution and road traffic accidents and reducing social isolation.

Building walking or cycling into daily routines is the most effective ways to increase physical activity and short car trips (under 5 miles) are a prime area for switching to active travel and public transport. Volume and speed of motorised traffic can reduce opportunities for positive contacts with other residents and can contribute to social isolation.[84] Disadvantaged areas tend to have a higher density of main roads, leading to poorer air quality, higher noise levels and higher collision rates.[85] The obesogenic environment impacts most on our most disadvantaged groups which discourages walking and cycling and further exacerbates health inequalities[86]

In 2014 2,082 children aged 0-15 were killed or seriously injured on Britain's roads[87] Children in the 10% most deprived wards are 4 times more likely to be hit by a car than those in the 10% least deprived .[88] Concern about road traffic injury is a major contributor to physical inactivity as parents can be reluctant to allow children out of the home without constant adult supervision. Improving access to safe and appropriate play spaces, including green space, is vital to enable more children to play outdoors.[89] Some areas have experimented with 'street play' time where streets have been closed for set periods on a regular basis to encourage children to play actively,

independently and safely near their own front door building resilience, confidence and self-esteem.[90]

A key challenge is to enable children to walk or cycle to and from school safely and actions to assist this can include developing a school travel plan, providing training and practical support to promote safe cycling, developing walking buses and other partnership work between schools, parents and carers, communities and the local authority. [91] There is growing evidence of the benefits of 20mph speed limits to reduce road danger, pollution and congestion [92] and repeated national surveys show strong public support for 20mph in residential streets[93] [94] and many towns and cities in England have implemented or are committed to 20mph speed limits across much of their road networks.[95]

Transport systems and the wider built environment play a crucial role in either promoting or hindering physical activity. People who cycle for travel purposes rather than for leisure are four times more likely to meet physical activity guidelines than those who do not.[96] It is not surprising therefore that those countries with the highest levels of active travel generally have the lowest obesity rates.[97]

The overall costs to society from road transport are substantial. It has been estimated that half of the UK's £10bn cost per annum of air pollution comes from road transport.[98] In terms of health care savings it has been estimated that £17bn over a 20 year period could be saved with the largest cost saving through the expected reduction in the number of cases of Type 2 diabetes[99] Investment in walking and cycling infrastructure or behaviour change programmes can be expected to deliver low cost, high-value dividends for individual health, the NHS, the transport system and the economy as a whole.[100]Any strategy must address the motivational and behavioural aspects to support people to become more physically active and one aspect is how we design, build and connect our neighbourhoods, towns and cities and the transport systems which support these.[80]

For older adults with low mobility and people with disabilities the built environment is key to maintaining independence and mobility [101] and consultations with these groups has highlighted the importance of adequate road crossings, pavements, toilets, and public seating when planning the urban design.[102] For those with dementia, having crossings with increased crossing times and audible and visual cues are necessary to help people with dementia cross the road safely.[103]

Access to green spaces influences physical activity across the life course with research suggesting that access to the natural environment increases physical activity and reduces obesity.[104][105] The use of green space declines with increasing distance from it. Research suggests that people living closest to formal parks are more likely to achieve recommended levels of physical activity and are less likely to be overweight or obese.[106] [107]Despite living in

rural communities people may find it as hard to be physically active as those who live in towns and cities due to being able to safely accessing services by walking and cycling with a lack of pavements or cycle ways and public transport can discourage use of the modes of transport even when moving between towns that may not be too far apart. It is a challenge for planners to consider how access can be improved and the needs of walkers and cyclists can be met in the design and planning of the rural road network.

3.8 Sport and Health

Public Health England and Sport England have been developing their relationship to bring together 'sport' and 'physical activity' and this has led to Sport England developing their new five year strategy Towards an Active Nation[108] which is focusing much more on tackling inactivity than it ever has done. In the past Sport England has funded projects that do not recognise activities such as walking, dance and utility cycling which can be extremely effective in reaching inactive people who might not consider themselves as 'sporty' however the next round of funding will address this.

The new strategy is calling for customer focused, behaviour change driven interventions which will tackle physical inactivity, particularly in children and young people and the under-represented groups, and will encourage strong and robust collaboration between partners who can deliver outcomes thus recognising the need to change ways of working in order to make a real difference.

The recent cross government strategy Sporting Future[109] details the change in measuring physical activity via the Active Lives survey rather than the traditional Active People survey to more accurately capture physical activity data again reflecting the move from sport to all physical activity in measuring national activity levels. Sport England will begin to work with organisations it has not traditionally worked with and bring together partnerships to deliver the objectives in the strategy and to build capacity across all sectors involved in increasing physical activity such as those involved in outdoor recreation.

While the Department of Culture Media and Sport (DCMS) who authored the strategy has a strong interest in getting people active in all settings, including outdoor recreation, they recognise that the Department for Environment, Food and Rural Affairs (Defra) has policy responsibility in England for the 'fabric' of the natural landscape, including rights of way, the England coastal path and National Parks. Given the joint interest in this area, DCMS and Defra will continue to work together to ensure the potential of our natural capital (including rights of way, canal and river paths, National Parks and Areas of Outstanding Natural Beauty, accessible forests and open spaces) to meet physical activity needs is met. Other departments also have a role in encouraging outdoor activity, for example the Department for Transport in delivering walking and cycling infrastructure or the Department for Communities and Local Government

in relation to urban green spaces and parks. These departments will also be linked in to this work.

3.9 Key Documents

Cumbria & Lancashire Sport & Physical Activity Strategy

Everybody Active Every Day

PH8 Physical Activity and the Environment

PH13 Physical Activity in the Workplace

PH17 Physical Activity for Children & Young People

PH41 Cycling & Walking

PH54 Exercise Referral Schemes

Sport England: Towards an Active Nation

Sporting Future: A New Strategy for an Active Nation

Lancashire Cycling & Walking Strategy

Working Together to Promote Active Travel: A briefing for local authorities

Healthy Weight

Obesity is a major public health problem due to its association with serious chronic diseases and the costs to both the individuals and society as a whole. The rapid increase in the number of obese people in the UK is a major challenge with analysis by the government's Foresight programme showing that over half of the UK adult population could be obese by 2050.[110] The economic implications are substantial with the NHS costs attributable to overweight and obesity projected to double to £10 billion per year by 2050 with the wider costs to society and business estimated to reach £49.9 billion per year.[111]

Obesity is a complex, but largely preventable condition which has serious, far reaching physical, psychological and social consequences that affects virtually all age and socioeconomic groups although some groups are affected more greatly than others. Obesity impairs a person's wellbeing, quality of life and ability to earn. Society has radically altered over the last five decades with major changes in work patterns, transport, food production and food sales. The pace of the technological revolution is outstripping human evolution[112] [113] [114] [115] [116] [117] [118] and for an increasing number of people weight gain is inevitable and largely involuntary and could be described as a consequence of a modern lifestyle.

4.1 How Do We Define Overweight and Obesity?

Overweight and obesity are defined as abnormal or excessive fat accumulation that may affect health. Body mass index (BMI) is a simple index of weight-for-height that is commonly used to classify overweight and obesity in adults. It is defined as a person's weight in kilograms divided by the square of his height in metres (kg/m^2).

The WHO definition is:

- a BMI greater than or equal to 25 is overweight
- a BMI greater than or equal to 30 is obesity.

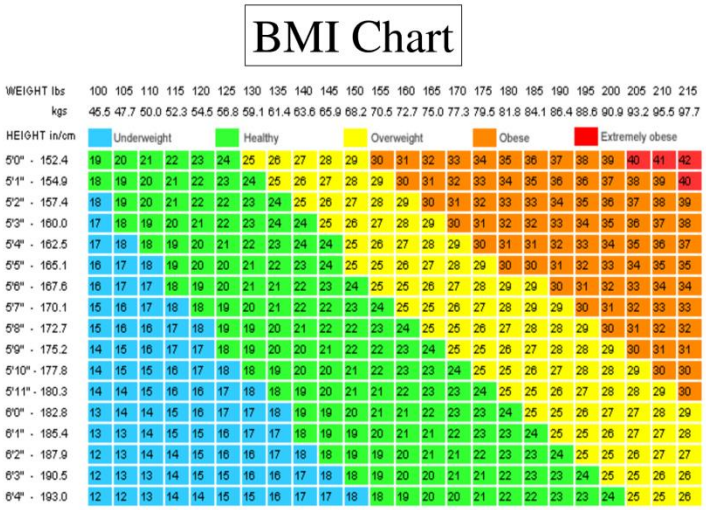

Figure 9 BMI Chart

BMI provides the most useful population-level measure of overweight and obesity as it is the same for both sexes and for all ages of adults. The clinical limitations of BMI should be considered. BMI is a surrogate measure of body fatness because it is a measure of excess weight rather than excess body fat. Factors such as age, sex, ethnicity, and muscle mass can influence the relationship between BMI and body fat.[119] Also, BMI does not distinguish between excess fat, muscle, or bone mass, nor does it provide any indication of the distribution of fat among individuals.

The following are some examples of how certain variables can influence the interpretation of BMI:

• On average, older adults tend to have more body fat than younger adults for an equivalent BMI.

• On average, women have greater amounts of total body fat than men with an equivalent BMI.

• Muscular individuals, or highly-trained athletes, may have a high BMI because of increased muscle mass.

Because no single body fat measure clearly distinguishes health from disease or risk of disease, BMI should serve as the initial screening of overweight and obesity for adults. It should be recognised that other factors, such as fat distribution, genetics, and fitness level, contribute to an individual's assessment of disease risk. However, BMI is a reasonable indicator of body fat for both adults and children. Because BMI does not measure body fat

directly, it should not be used as a diagnostic tool. Instead, BMI should be used as a measure to track weight status in populations and as a screening tool to identify potential weight problems in individuals.

BMI for Children and Young People

The concerns associated with using BMI for adults also apply to children and adolescents. Other factors, including height and level of sexual maturation, influence the relationship between BMI and body fat among children as well. For children and teens age 2-19, BMI is age and sex-specific and is often referred to as BMI-for-age - example for boys shown in Figure 10. A child's weight status is determined using an age and sex-specific percentile for BMI rather than the BMI categories used for adults. This is because children's body composition varies as they age and varies between boys and girls. Therefore, BMI levels among children and teens need to be expressed relative to other children of the same age and sex as in NCMP data.

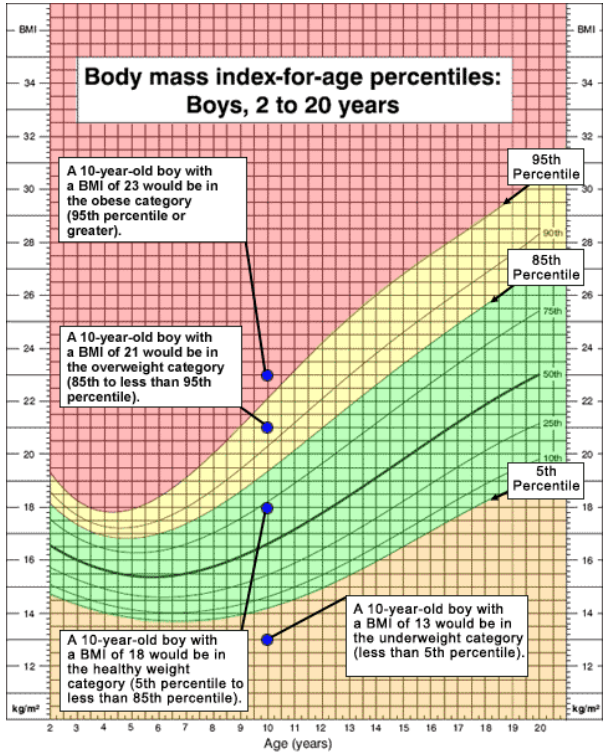

Figure 10 BMI-for-age Boys (Centre for Disease Control)

Weight Status Category	Percentile Range
Underweight	Less than the 5th percentile
Normal or Healthy Weight	5th percentile to less than the 85th percentile
Overweight	85th to less than the 95th percentile
Obese	95th percentile or greater

Figure 11 Obesity as a complex issue. (Source: Adult obesity:applying All Our Health, Public Health England, 2015)

4.2 What causes obesity?

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

The 2007 government-commissioned Foresight Report [7] describes obesity as a complex system where there are many causes and no single cause dominates (Figure 11).

The technological revolution during the 20th century has left an obesogenic environment which is exposing the biological vulnerability of humans.

However this alone cannot explain the rapid increase in the prevalence of obesity in the population over the last three decades. Changes in the external environment have revealed the underlying tendency to gain weight and obesity is linked to social developments and shifts in values such as changes in work/home lifestyle patterns, motorised transport, changes in food production and marketing.

Much unhealthy behaviour that is common today are the 'easy' option for instance many children who are driven to school could in fact could walk or cycle however parental fears about potentially dangerous roads, long travel distances and the need for convenience prevent this from happening, therefore removing an opportunity to be physically active. This so called 'passive obesity' makes healthy behaviours an inherent challenge. Attitudes and responses are key drivers of obesity trends where an ambivalent attitude towards obesity brings a psychological conflict between what people want to eat (high calorie high sugar high fat foods) and their desire to be healthy and/or slim combined with mixed feelings about broader lifestyles choices complicates individual choices. Many people do not perceive obesity as an issue that affects them personally and consequently public demand for action on obesity is relatively weak.[120]

Obesity takes time to develop and the risks of obesity start at an early stage with growth patterns in the first few weeks and months of life can affect the risk of obesity and chronic disease later in life.[117] [121] Obesity in a parent increases the risk of childhood obesity by 10%.[122] Although this is the result of many biological, social and environmental factors, it is important to break this reinforcing pattern.[123] However most children are not obese and currently most cases of obesity become apparent in adulthood.

4.3 National Picture of Overweight and Obesity

4.3.1 Adults

Data from the 2014 Health Survey for England reveals that obesity prevalence has increased from 15% in 1993 to 26% in 2014 (Figure 12). The rate of increase has slowed down since 2001, although the trend is still upwards. Morbid obesity (BMI >40) has more than tripled since 1993 2% men and 4% women. The prevalence of overweight has remained broadly stable during this period at 36-39%. The rapid increase in the prevalence of overweight and obesity has meant that the proportion of adults in England with a healthy BMI (18.5 - 24.9) decreased between 1993 and 2014 from 41.0% to 32.7% among men, and 49.5% to 40.4% among women.

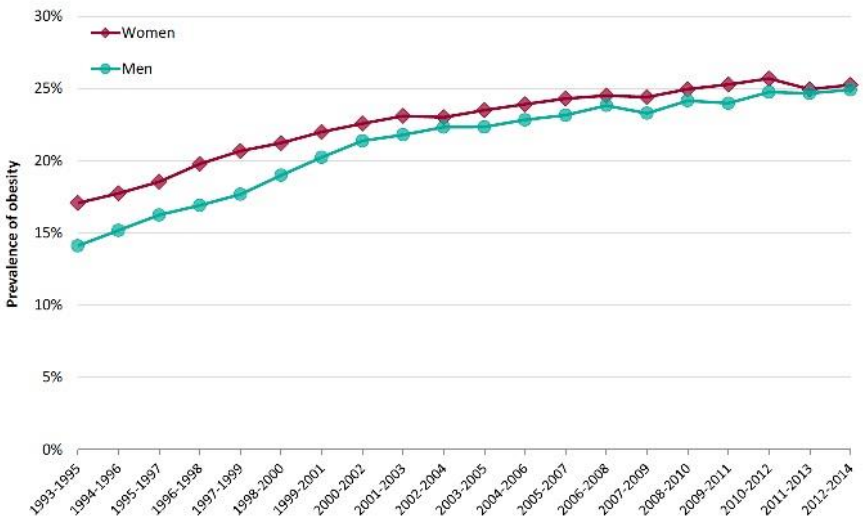

Figure 12 Prevalence of obesity among adults aged 16+ years 3-year average (Health Survey for England 1993-2014)

4.3.2 Prevalence by Gender

Overall rates of overweight and obesity are 58% in women and 65% in men. A similar proportion of men and women are obese (24% of men and 27% of women) but men more are likely than women to be overweight (41% men and 31% women). The mean BMI for both sexes is 27.2 kg/m^2 which sees the average BMI in the UK is now in the overweight range.

The prevalence of obesity increases with age in both groups peaking in the 55-64 year old age group in men and the 64-75 age group in women with over three quarters of women over 45 being overweight or obese. The prevalence then decreases in the oldest age groups for both genders. More women than men have higher waist circumference (66% of women and 54% of men) however this is more marked in very high waist circumference (45% of women and 32% of men).

By 2050 obesity is predicted to affect 60% of adult men and 50% of adult women.[110]

4.3.3 Children

Data from the most recent National Child Measurement Programme[124] for England has shown that the prevalence of obesity and overweight in Reception children is gradually falling from the 2006/07 data. However in Year 6 children the prevalence is increasing in both overweight and obese categories (obese 19.1% from 17.5% and either overweight or obese 33.2% from 31.6%). When comparing Reception with Year 6 measurements, the percentage of obese children in Year 6 (19.1%) was over double that of reception year children (9.1%).

The prevalence of obesity has increased since 1995 but remains similar between boys and girls, when 11% of boys and 12% of girls aged 2-15 were obese and in the following 10 years prevalence is at 19% of boys and 16% of girls. By 2050 obesity in children is predicted to affect 25% of children.[125]

4.4 Obesity and Health

The effects of obesity on the body include both obvious physical changes, due to the increased mass of fatty tissue, and changes at the cellular and metabolic level due to increased production of various products by enlarged fat cells.

The physical changes caused by increased fat are behind the musculoskeletal problems suffered by overweight and obese people (increased wear and tear on joints), sleep apnoea (partly due to fatty deposits around the airway) and the psychological and social difficulties caused by altered body image and stigma.

Most other effects of overweight and obesity are due to 'invisible' changes such as an increase of fat in blood and an altered response to insulin. There are also indirect effects through lifestyle factors associated with obesity, such as poor diet and sedentary lifestyle, which have an independent impact on health.

There is now a considerable body of evidence linking obesity with a wide range of health issues as described below:

Circulatory System

- Raised BMI increases the risk of hypertension (high blood pressure), which is itself a risk factor for coronary heart disease and stroke and can contribute to other conditions such as kidney failure.
- The risk of coronary heart disease (including heart attacks and heart failure) and stroke are both substantially increased.

Musculoskeletal System

- Raised body weight puts strain on the body's joints, especially the knees, increasing the risk of osteoarthritis (degeneration of cartilage and underlying bone within a joint).
- There is also an increased risk of low back pain.

Metabolic and endocrine system

- The risk of Type 2 diabetes is substantially raised.
- There is a greater risk of dyslipidemia (for example, high total cholesterol or high levels of triglycerides), which also contributes to the risk of circulatory disease by speeding up atherosclerosis (fatty changes to the linings of the arteries).
- Metabolic syndrome is a combination of disorders including high blood glucose, high blood pressure and high cholesterol and triglyceride levels. It is more common in obese individuals and is associated with significant risks of coronary heart disease and Type 2 diabetes.

Cancers

- The risk of several cancers is higher in obese people, including endometrial, breast and colon cancers.

Reproductive system

- Obese women are at greater risk of menstrual abnormalities, polycystic ovarian syndrome and infertility.
- Obese men are at higher risk of erectile dysfunction.
- Maternal obesity is associated with health risks for both the mother and the child during and after pregnancy

Respiratory System

- Overweight and obese people are at increased risk of sleep apnoea (interruptions to breathing while asleep) and other respiratory problems such as asthma.

Non-alcoholic fatty liver disease

- The term 'non-alcoholic fatty liver disease' (NAFLD) refers to a range of conditions resulting from the accumulation of fat in cells inside the liver. It is one of the commonest forms of liver disease in the UK. If left untreated, it may progress to severe forms such as non-alcoholic steatohepatitis (NASH), fibrosis and cirrhosis. It has also been linked to liver cancer.
- Obesity is an important risk factor for the condition: over 66% of overweight people and over 90% of obese individuals are at risk of NAFLD. As levels of obesity have risen, so has the prevalence of NAFLD.[126]

Healthy Lives, Healthy People: A call to action on obesity in England[125] reported that the health risks for adults with obesity are stark. For example, compared with a non-obese man, an obese man is:

- five times more likely to develop type 2 diabetes
- three times more likely to develop cancer of the colon
- more than two and a half times more likely to develop high blood pressure – a major risk factor for stroke and heart disease.

An obese woman, compared with a non-obese woman, is:

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

Risks of other diseases, including angina, gall bladder disease, liver disease, ovarian cancer, osteoarthritis and stroke, are also increased (Figure 13).

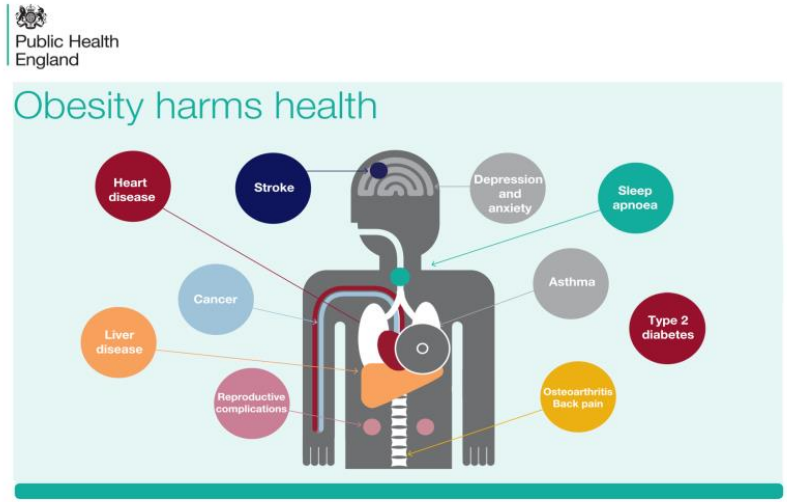

Figure 13 How obesity harms health (Public Health England, 2015)

4.4.1 Hypertension

Recent data has shown that obese adults have about twice the prevalence of hypertension when compared with adults who were normal weight (42% of obese men and 37% obese women compared to 22% men and 18% women of normal weight).[127]

4.4.2 Diabetes

Obesity is described by Public Health England as the main modifiable risk factor for type 2 diabetes in a new report which explores the links between the two.[128] Obese adults are five times more likely to be diagnosed with diabetes than those of a healthy weight, and 90% of those with type 2 diabetes are overweight or obese. Type 2 diabetes is anything up to five times more common than average in some BME groups, and strikes at a younger age. For people of black, Asian and other minority ethnic heritage, being overweight (as measured by their body mass index, or BMI) carries an even higher risk of type 2 diabetes than it does for white Europeans. After applying alternative BMI thresholds for BME groups the differential risk of diabetes in these groups show Asian men and women are at greater risk of diabetes despite Asian men having the lowest mean BMI (77% of Asian men compared to 68% of all men and 98% Asian women compared to 59% of all women).[128]

4.4.3 Potential health risks of obesity in children and young people

Recent research is showing some potentially frightening statistics in terms of the potential health risks posed to obese children and young people. Type 2 diabetes usually appears in adults, but recently more children in the UK are being diagnosed with the condition, some as young as seven.[129] A surveillance programme of children under 17 in the UK found that 95% of those diagnosed with type 2 diabetes were overweight and 83% obese. Type 2 diabetes was found to be increasing with children from minority ethnic groups at higher risk than white children.[130] Recent analysis of the National Longitudinal Study of Adolescent Health found that diabetes risk was particularly high in adults who were obese as adolescents compared to those with adult-onset obesity[131] making early intervention crucial in averting a potential health time bomb.

Overweight and obese children are at a 40-50% increased risk of asthma compared to normal weight children.[132] It is also suggested that a higher BMI contributes to asthma development and may also lead to more severe asthma[133] with the possibility of a causal link between obesity and asthma in children, with rapid growth in BMI during the first 2 years of life increasing the risk of asthma up to age 6 years.[134] A recent review on childhood obesity and obstructive sleep apnoea reported that prevalence of among obese children and adolescents could be as high as 60%.[135]

US studies have shown that obese children are at increased risk of cardiovascular disease with one study showing 70% of obese 5-17 year olds were found to have at least one risk factor for cardiovascular disease for example high cholesterol levels, high blood pressure and abnormal glucose tolerance[136] and further study also found that childhood obesity is associated with a quadrupled risk of adult hypertension (26% of obese children had hypertension as adults compared to 6% of normal weight children).[137]

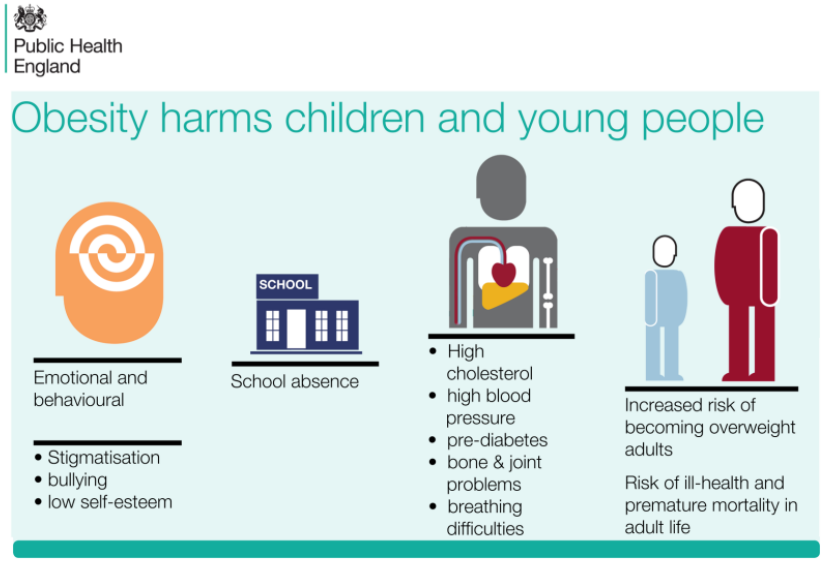

Figure 14 How obesity harms children and young people (Public Health England, 2015)

4.4.4 Underweight & Health

The prevalence of adults underweight has remained stable over the last few years at around 2% of the population[138] which is approximately the same prevalence as the rate of morbidly obese adults in the UK. According to NCMP data, the prevalence of underweight children in Reception is currently 1% and Year 6 at 1.4% however underweight prevalence was significantly higher than the national average in both years in the 'Asian or Asian British' group (3.6% in both years). Recent PHOF indicators have shown that 2.9% of all babies born in the UK are a low birth weight.[139] Babies of South Asian heritage are 2.5 times more likely to be of low birth weight[140] and there is a large body of evidence to suggest that low birth weight and chronic disease are closely linked and therefore there may be a suggestion that addressing low birth weight will help to reduce chronic disease in later life however when looking more closely at the biological make up of Pakistani-origin born infants it can be seen that they are relatively more adipose than white British infants[141] with BME babies being markedly lighter but have similar skinfold thickness and greater total fat mass than White British infants. Efforts to reduce ethnic inequalities in birth weight need to consider that increasing birth weight will also increase fat mass and may inadvertently worsen health outcomes in the long term.

Whilst there is an issue with the prevalence of underweight people in the UK and that being underweight carries its own risks the prevalence of overweight and obesity is far greater and carries a greater public health concern which requires addressing through policy change and the delivery of population approach initiatives.

4.5 Cost of Obesity

The impact of overweight and obesity on individuals and families in terms of ill-health places a significant burden on NHS resources. The direct cost to the NHS in 2006/07 of people being overweight and obese was £5.1 billion, and is expected to reach £9.7 billion by 2050.[111] The impact on wider society and the economy is also a concern. Obesity impacts on employment opportunities and life chances in general but employers bear the major cost. There are an estimated 16 million days of certified incapacity per annum

directly related to obesity. Alongside the growing burden on the public sector there is an impact on Local Authorities including the cost to social services for caring for housebound people suffering from illness as a consequence of obesity. The estimated annual social care costs to local authorities are an estimated £352 million. In relation to the wider economy the indirect costs could be as much as £27 billion (Figure 15).[111]

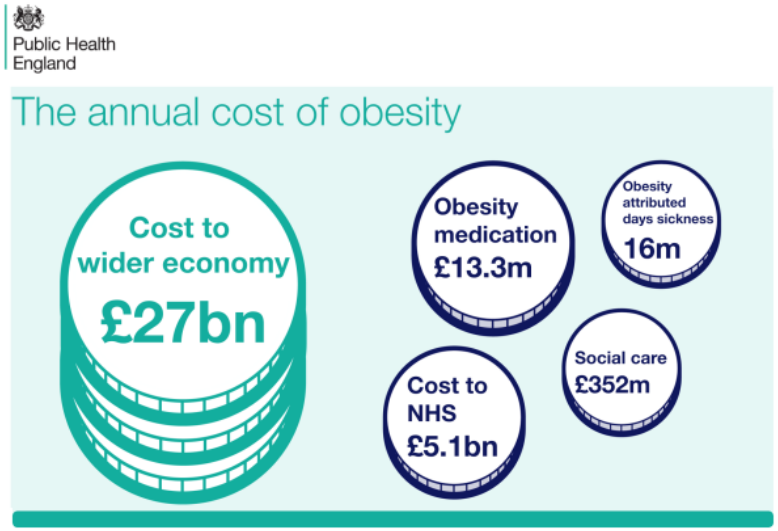

Figure 15 Adult Obesity: applying All Our Health (Public Health England, 2015)

4.6 Maternal Healthy Weight

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

The Centre for Maternal and Child Enquiries (CMACE), conducted a national audit of obesity during pregnancy between 1 March and 30 April 2009, of all maternity units in the UK, Channel Islands and Isle of Man. The results showed that out of a total of 128,290 women reported to have given birth (≥24 weeks' gestation), 6413 were identified as having a BMI ≥35 at any time during pregnancy. The UK prevalence rate was 4.99%.[142] It is important to emphasise that the BMI threshold of ≥35 is higher than the standard threshold for obesity which is ≥30kg/m2 due to the physiological changes experienced during pregnancy. The median maximum reported pregnancy BMI for women within the cohort was 39.1.

Obesity increases the health risks to the mother during the antenatal, intrapartum, and postnatal periods. The CEMACH report (2003-2005) summarises the risks related to obesity during pregnancy for the mother as:[143]

- maternal death or severe morbidity
- cardiac disease
- spontaneous first trimester and recurrent miscarriage
- pre-eclampsia
- gestational diabetes

- thromboembolism
- post-caesarean wound infection
- infection from other causes
- postpartum hemorrhage
- low breastfeeding rates

Maternal obesity can lead to the need for additional healthcare due to complications associated with the pregnancy with increased numbers of caesarean sections, increased length of hospital stay and increased admissions for complications during pregnancy:[144] [145]

The CEMACH report for the period 2003-2005 identifies the risks of maternal obesity to the child as:

- stillbirth
- neonatal death
- congenital anomalies
- prematurity

In 2005, 22.9% of mothers who had late fetal loss were obese, as were 30.4% of the women who experienced stillbirths, and 30.6% of those who experienced neonatal deaths. [146]

It is well recognised that children who are obese are likely to have obese parents.[147] [148] Life course research suggests that adult health and inequalities can be influenced whilst in the womb.[149] There is a significant relationship between maternal obesity, babies of heavier weight, and the subsequent development of childhood and adult obesity in their offspring.[150] [151] [152] [153] [154]A systematic review of the childhood predictors of adult obesity showed that maternal obesity and weight gain during pregnancy are related to higher BMI in childhood and subsequent obesity in adulthood.[147]

It is clear that there is a lot of work already being done by many individuals and organisations to tackle the issue. However to impact on the population's current and future health we need to act at a greater scale, using evidence based and properly targeted interventions. A multi-agency approach will be necessary to ensure that the delivery of local strategies through their plans and actions to contribute to improving the health and wellbeing, and add value to those identified actions.

4.7 Healthy Weight and Inequalities

4.7.1 Adults

Obesity prevalence in England is known to be associated with many indicators of socioeconomic status, with higher levels of obesity found among more deprived groups. Socio-economic indicators are a greater factor for women with increased obesity seen in the most deprived areas at 33% compared to 22% in the least deprived areas which is a trend that is not seen in men.[155]

Amongst men white groups had the highest average BMI at 27.4 and Asian groups the lowest at 26. Similarly Asian women have the lowest average BMI (26.2). As discussed previously BMI does not account for differences in ethnicity [156] and much discussion continues around the accuracy of the use of

BMI in the South Asian population when linking it to obesity related conditions.

4.7.2 Children

Obesity prevalence in children is also strongly correlated with deprivation and is highest in the most deprived areas. There is a steady rise in obesity prevalence with increasing deprivation for both Reception and Year 6 children. Whilst there is some emerging evidence that national child obesity levels have plateaued, rates in the more deprived areas continue to rise. The obesity prevalence among Reception year children living in the most deprived areas was 12.0% compared with 5.7% among those living in the least deprived areas. Similarly, obesity prevalence among Year 6 children living in the most deprived areas was 25% compared with 11.5% among those living in the least deprived areas. [124]

Obesity prevalence was significantly higher than the national average for children in both school years in the Asian and Asian British and 'mixed' ethnic groups. There are known associations between ethnicity and area deprivation. Deprived urban areas in England tend to also have a higher proportion of individuals from non-White ethnic groups, so it is likely that there are confounding factors which affect obesity prevalence by ethnic group.

4.8 Physical Activity & Obesity

The Health Survey for England 2008-9 report[81] had a special focus on physical activity and it revealed that both men and women who were overweight or obese were less likely to meet the recommendations compared with men and women who were not. 46% of men who were not overweight or obese met the recommendations, compared with 41% of overweight men and 32% of obese men. A similar pattern emerged for women, with 36% of women who were not overweight or obese meeting recommendations, compared with 31% of overweight and 19% of obese women. Given these findings, it is not surprising that obese men and women had the highest rates of low activity (36% and 46% respectively).

When considering time spent being sedentary (measured by an accelerometer) by BMI category, those who were not overweight or obese spent fewer minutes on average in sedentary time (591 minutes for men, 577 minutes for women) than those who were obese (612 minutes for men, 585 minutes for women).

New research is beginning to show that there is a new risk group for overweight development. [157] This group is young adult female 'computer gamers'. In the prospective study, leisure time computer gaming was a prospective risk factor for overweight in women even after adjusting for demographic and lifestyle factors, but not in men. Working to reduce gaming time and screen time in general will be a key factor in reducing obesity levels in children and young adults.

4.9 Obesity and the Environment

It is now widely recognised that the built environment is one of the many complex factors that influence whether or not people are obese or overweight and the choices we make on a day to day basis that are influenced by the environment, the behaviour of those around us and the current culture relating to food and physical activity which favours over consumption and inactivity make it increasingly difficult to be a healthy weight.

These factors can be exacerbated in deprived areas. Children living in the most deprived areas are twice as likely to be obese as children living in the least deprived areas.[158] People who live in deprived areas are more likely to live near fast food outlets [159] and ten times less likely to live in the greenest areas.[160] So, place is important and the connection between people living in a deprived area with little access to green spaces and poor health and wellbeing is evident and it is crucial that public health and planning work together to ensure good quality housing with access to lots of green space and tighter controls over the number and location of fast food outlets.

With a whole systems approach to tackling obesity, joining up policy actions for tackling obesity from the health and planning perspectives is a priority in tackling obesity. Local strategies should include specific priorities to guide planners about how to achieve healthy weight environments when reviewing plans to maximise opportunities to be physically active. It is recommended that councils should encourage their public health and planning team to agree a process that supports public health teams to comment on relevant planning applications at a useful point in the development management process.

Public Health England and the Town and Country Planning Association's planning healthy weight environments [161] identified six elements to achieve healthy weight environments through the planning process. These elements provide a useful framework to consider the impact of new developments with a local planning and health checklist could be created as part of guidance given to developers

- Movement and access – walking & cycling environment, local transport services
- Open spaces, recreation and play – open spaces, natural environment, leisure and recreational spaces, play spaces
- Food environment – food retail, food growing, access to
- Neighbourhood spaces – community and social infrastructure, public spaces
- Building design – homes, other buildings
- Local economy – town centres and high streets, job opportunities and access

It is envisaged that with the recognition of the impact of the environment on obesity, the development of local strategies and close working between

public health and planning can make a real difference to the health and wellbeing of the population.

The UK has become a nation where being overweight has become usual, rather than unusual. The rate of increase in overweight and obesity in both children and adults is striking. Obesity threatens the health and wellbeing of individuals and will place an intolerable burden on the economy as a whole. Once a person has gained weight, it is hard to lose it therefore we must start early to help people avoid becoming overweight and obese in the first place, as well as providing support to enable and empower people to help themselves.

Whilst it is recognised that all our behaviours are interconnected and overweight and obesity are the outcomes of our food intake and activity levels the environment we live in along with our social-economic status and ethnicity plays a major role in our likelihood of becoming overweight or obese. The development of this strategy should consider both a population based approach with special consideration for those most at risk.

4.10 Key Documents

Building the Foundations: Tackling obesity through planning and development

CG43 Obesity Prevention

NG13 Workplace Health

NG7 Maintaining a Healthy Weight and preventing excess weight gain amongst adults and children

PH42 Obesity Working with local communities

PH47 Weight Management: Lifestyles services for overweight and obese children and young people

PH11 Maternal and child nutrition

PH27 Weight management before during and after pregnancy

PH53 Type 2 Diabetes Prevention: population and community level interventions

PH25 CVD Prevention

PH46 BMI: preventing ill health and premature deaths in black Asian and other minority ethnic groups

PH49 Behaviour Change; Individual approaches Public Health England; Obesity and the environment briefing; regulating the growth of fast food outlets

TCPA Planning healthy weight environments

What is the local picture in Blackburn with Darwen?

5.1 Population

Data from the 2016 summary review of Blackburn with Darwen's Integrated Strategic Needs Assessment [162]tells us that the population estimate is around 147,000 with a much younger age profile than average with 28.7% of its population aged under 20, which is the fifth highest proportion in England. The North (32.8%) and East localities (33.4%) have a higher than the borough average of children and young people. There is a projected slow, steady rise in population driven by the growth of the over 65 age group. The Darwen and Rural locality currently has the highest proportion of over 65's (15.4%).

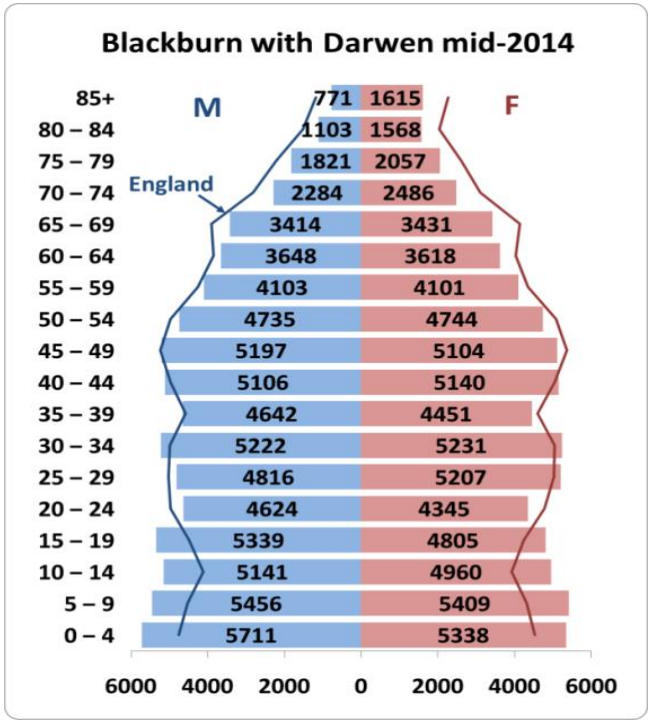

Figure 17 ONS mid-2014 population estimate for Blackburn with Darwen (with England profile for comparison)

5.2 Ethnicity

Blackburn with Darwen's black and ethnic minority community make up just over 30% of the population and the main ethnic groups have markedly different age profiles from each other as can be seen in Figure 17. The proportion of residents who are Indian or Pakistani are the 11th highest and the 6th highest respectively of any local authority in England. There is a stark difference in ethnicity between localities with more than two out of three residents (67%) in the North locality have South Asian ethnicity whereas 95.5% of residents in Darwen and Rural locality are white British.

The most recent Child Health Profile for Blackburn with Darwen reveals that 52% of school children are from a minority ethnic group which compares to a national average of 28.9%.[163]

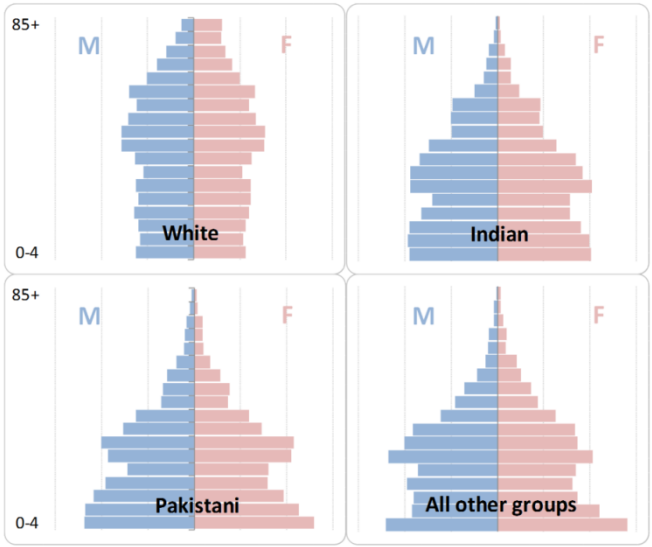

Figure 16 Ethnicity Blackburn w Darwen vs North West & England 2011

5.3 Deprivation

Blackburn with Darwen is the 15th most deprived borough in England. Nearly half (45 out of 91, or 49%) of the Borough's Lower Super Output Areas (LSOAs) are in the worst two national deciles. By definition, each national decile accounts for 10% of all the LSOAs in England, so Blackburn with Darwen has well over its 'fair share' of deprived LSOAs. On the local Children in Low Income Families Local Measure, 9105 children in Blackburn with Darwen, or 22.5% of the total, were 'in poverty' in 2013. In some areas this figure is higher – 40% of children in parts of Sudell and a third of children in parts of Shadsworth and Highercroft are 'in poverty'.

5.4 Life Expectancy

Life expectancy in Blackburn with Darwen has risen over the years, but the England average has risen faster. There is also striking inequality in life expectancy *within* Blackburn with Darwen. In 2012-14, the difference in male life expectancy between the most and least deprived deciles was 13.5 years and in women it was 8.8 years and this gap appears to be growing.

The public health system is concerned not just with extending life, but with improving health and wellbeing across the life course. Healthy Life Expectancy in Blackburn with Darwen is 58.0 years for males and 60.3 years for females, both of which are significantly lower than the England average (63.4 and 64.0 respectively).

5.5 Obesity

In 2012-14, an estimated 75,000 (66.5%) adults in Blackburn with Darwen adults were overweight or obese. [164] This is not significantly different from the England average of 64.6%, but that itself is of course far from ideal. Within Blackburn with Darwen obesity levels are highest in the East and Darwen and Rural localities but are still not significantly higher than the national average.

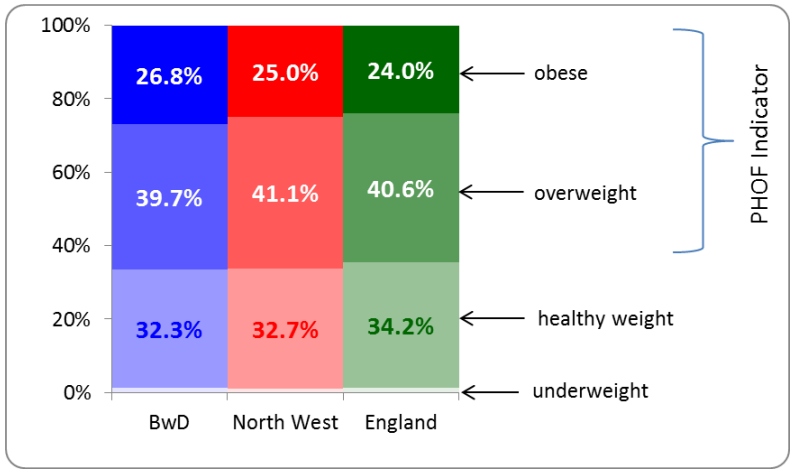

Figure 18 Adult excess weight 2012-14 (Blackburn with Darwen, NW and England)

The most recent NCMP data (2015-16) has shown that, as with adults, children in Blackburn with Darwen have average obesity levels. 9.4% of children aged 4-5 and 22.1% of children aged 10-11 are classified as obese. Levels of obesity and overweight have remained static over the past years in 10-11 year olds however there appears to have been an overall reduction in

the 4-5 year olds in the past 5 years. When broken down further into locality areas obesity rates in reception age children in the East locality are higher than the borough average. Obesity levels reach 15% in Highercroft, Earcroft and Ewood wards. The North locality has higher rates of obesity by year 6 which is a picture replicated in Darwen and Rural locality with obesity prevalence reaching 25% in parts of Sudell.

The 2014-15 NCMP data revealed that the proportion of children who are underweight in Blackburn with Darwen, though small, is significantly higher than average. The Reception rate of 1.8% is the 15th highest out of all upper-tier local authorities in England, and the Year 6 rate of 2.9% is the third highest.

Local Public Health Outcome Framework data shows that Blackburn with Darwen has a low birth rate of 4.3% of all babies born which is significantly higher than the national average (2.9%).[164]

5.6 Health Picture in Blackburn with Darwen

5.6.2 Cardiovascular Disease

Cardiovascular disease, or CVD, is an umbrella term for conditions of the circulatory system, such as coronary heart disease (CHD), stroke, heart failure and rhythmic heart disorders. Together these accounted for 27.2% of all deaths in England & Wales in 2014[165] and 28.6% in Blackburn with Darwen. In 2012-14, the Borough had the second highest all-age mortality rate for CVD out of 152 upper-tier authorities in England.[166]

Attention tends to focus on the portion of CVD mortality which is considered 'premature' – i.e. below age 75. Blackburn with Darwen's rate in this age-group is consistently higher than average (Figure 19), and was the 6th highest out of 152 upper-tier authorities in 2012-14.

Blackburn with Darwen has the 7th highest premature death rate from 'preventable' types of CVD, and the 5th highest from CHD in particular. The borough also has the ninth highest premature death rate from Stroke, which is not so readily preventable in this age group.

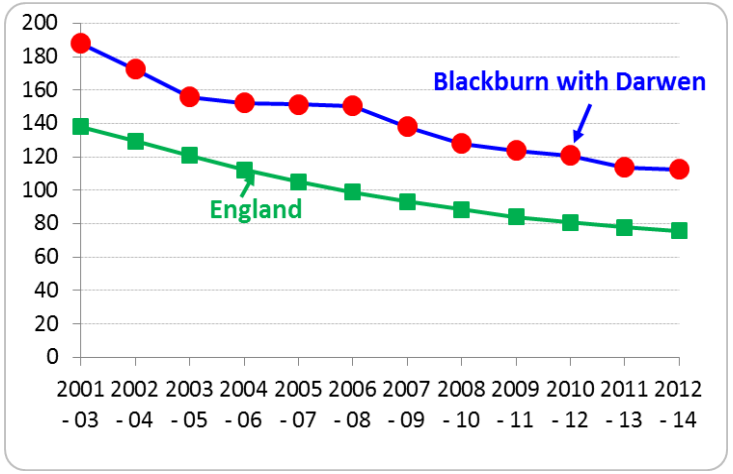

Figure 19 - CVD mortality under age 75 (directly standardised rate per 100,000 persons)

5.6.3 Diabetes

In the case of type 2 diabetes, prevalence varies greatly with age (Figure 20), and is much higher in Blackburn with Darwen (hatched+solid) than in England generally (hatched portion only).

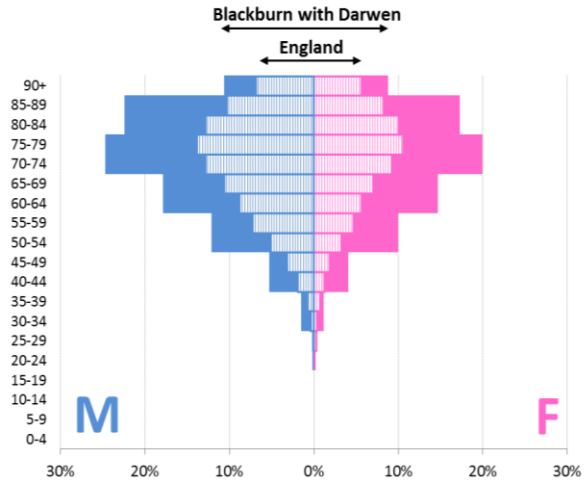

Figure 20 - Prevalence of type 2 diabetes by 5-year age-group (England) / 10-year age-group BwD

5.6.4 Hypertension

The recent hypertension profile suggests that Blackburn with Darwen is 220 out of 326 authorities for hypertension lifestyle risk factors - physical inactivity, obesity and excess alcohol drinking.[167] The total spend on prescriptions for hypertension in Blackburn with Darwen in 2104-15 was £472,000 and whilst some of this spend is for the treatment of heart failure and kidney failure a large percentage could be saved by increasing physical activity levels and reducing obesity levels in the borough.

5.6.5 Falls

The Public Health Outcomes Framework records the annual age-standardised rate of falls-related emergency hospital admissions among residents aged 65+. Blackburn with Darwen had 515 such admissions in 2014/15, and its rate is consistently higher than the national average.[139]

Almost half of falls-related emergency admissions in Blackburn with Darwen residents aged 50+ (46%) of the 3948 admissions during this five-year period were in the oldest (80+) age category).[168] As age increases, female patients account for an ever higher proportion of falls admissions. Hospital admission statistics only give a part of the whole picture as many more people will have been seen by their GP after a fall or had a fall that has gone unreported as they have not sought medical assistance.

5.6.6 Dementia

At the last count (August 2014), 813 patients with a Blackburn with Darwen GP had been diagnosed with dementia.[169] Recorded prevalence, however, only tells part of the story. A further unknown number are likely to be living with dementia without ever having received a diagnosis. According to the new estimates, Blackburn with Darwen probably had approximately 1420 residents with dementia in 2013 (either diagnosed or undiagnosed). If dementia prevalence rates remain unchanged for each age-group these numbers *might* rise to about 2440 residents by the year 2035.

5.6.7 Breastfeeding

Breastfeeding initiation rates in Blackburn with Darwen have risen steadily over the last few years from 72.8% in 2010-11 to 74.4% (most recent figures from East Lancashire Hospital 27th July 2016) in 2015-16 and current initiation rates are only slightly lower than the national average (74.3%). Similarly breastfeeding prevalence has increased over the years but still falls short of other nations.

5.6.8 Dental Health

Following a consultation exercise PHE has decided to change definition of the Public Health Outcomes Framework indicator[139] (PHOF 4.02) from "*tooth decay in children aged 5*" measured in terms of dmft (decayed, missing and filled teeth) to "*proportion of five year old children free from dental decay*", stating that the new prevalence measure is easier to interpret for non-dental experts. This may be true, but it requires us to get used to the idea that a higher proportion is desirable (previously the proportion was usually quoted the other way round).

Nationally, the results show a continued increase in the proportion of children with no obvious dental decay from 69.1% in 2008 and 72.1% in 2012 to 75.2% in 2015, equating to a change of six percentage points and an improvement of 8.8% since 2008. Unfortunately, Blackburn with Darwen has not experienced a similar trend but has in fact shown the opposite. The proportion of children with no obvious decay was 48.9% in 2008, and rose to 58.9% in 2012 but then dropped to 43.9% in 2015. Blackburn with Darwen was ranked the worst local authority with the lowest proportion of children aged 5 with no obvious dental decay in 2015.[170] The average child in the borough had 2.4 decayed, missing or filled teeth, which was the second highest in England

Public Health England's first ever dental survey of 3-year old children found that 20.6% in Blackburn with Darwen had decayed, missing or filled teeth, compared with an England average of 11.7%.[171] The average child in the borough had 0.79 decayed, missing or filled teeth (England average 0.36). On both measures, Blackburn with Darwen ranks 10th highest out of all upper-tier authorities.

9.1% of 3-year olds surveyed in the borough had 'Early Childhood Caries', an aggressive form of decay affecting the upper incisors, associated with the long-term use of bottles with sugar-sweetened drinks. This is the 12th highest rate, and compares with an England average of only 3.9%.

5.7 Local Food Facts

Data on fruit and vegetable consumption from 2014 shows the Blackburn with Darwen value of 47.1% to be significantly worse than the national average of 53.5% for reaching the target of '5 a day The mean number of pieces of fruit eaten daily in Blackburn with Darwen is 2.4 and the mean number of vegetables slightly lower at a value of 2.[172]

5.8 Physical Activity

Turning the Tide UK Active's 2014 report identifies Blackburn with Darwen as one of the most inactive local authorities in England (Figure 21) with 36.95% of adults classified as physically inactive. The report also estimates that this level of inactivity per 100,000 people costs the borough £24,225,029.

Most inactive 15 local authorities

Highest Levels of Inactivity	Percentage of Inactive Adults (%)
Stoke-on-Trent	35.07
Newham	35.11
Barking and Dagenham	35.14
Luton	35.88
Kingston upon Hull	36.07
Oldham	36.28
Coventry	36.81
Blackburn with Darwen	36.95
Sunderland	36.99
Slough	37.58
Dudley	37.67
Bradford	37.68
Salford	39.07
Sandwell	39.13
Manchester	40.24

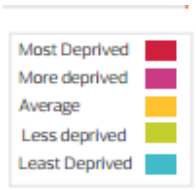

Figure 21 Most inactive 15 local authorities (UK Active, 2014)

When UK Active produced 'Steps to Solving Inactivity' later in 2014[173], Blackburn with Darwen had moved out of the top 15 of most inactive local authorities into 16th place with new inactivity levels of 35.73% showing a reduction in physical inactivity of just over 1%. That means that 52,500 people in Blackburn with Darwen are not doing enough physical activity to benefit their health.

More recent data from the Public Health Outcomes Framework [174] shows that the level of inactivity has remained relatively stable at 35.6%. The new dataset gives more detailed local information around physical activity habits as shown in Figure22. The table also shows the comparison at regional and national level.

Whilst most adults are around the national average for 30-149 minutes of physical activity per week there are a significantly higher than average number of inactive adults participating in less than 30 minutes of physical activity per week and significantly lower than average achieving the recommended minimum levels of physical activity. 15 year olds in Blackburn with Darwen are significantly less sedentary than the national average, however only 12.4% are active to the minimum recommended levels

Sport England's Local Sport Profile Tool shows participation in sport once a week.[175] In 2014-15 48,000 people in Blackburn with Darwen were participating once a week (32.7% locally, national participation 35.8%). Whilst there has been a steady increase in participation in sport and physical activity over the years it does not mean that we can be complacent as there is still a great deal of work to be done to encourage more people in the borough to become physically active at recommended levels. Whilst this is not significantly worse than the national average some work is required to embed physical activity as a routine and natural way of life moving into adulthood.

Compared with benchmark | Better | Similar | Worse | Lower | Similar | Higher

Indicator	Period	England	North West region	Blackburn with Darwen
Percentage of adults doing 150+ minutes physical activity per week	2015	57.0	53.7	48.7
Percentage of adults achieving less than 30 minutes of physical activity per week	2015	28.7	32.0	35.6
Percentage of adults doing 30-149 minutes physical activity per week	2015	14.3	14.2	15.7
Percentage of 15 year olds physically active for at least one hour per day seven days a week	2014/15	13.9	13.2	12.4
Percentage of 15 year olds with a mean daily sedentary time in the last week over 7 hours per day	2014/15	70.1	71.2	63.2
Percentage of adults who do any walking, at least five times per week	2014/15	50.6	48.5	45.3
Percentage of adults who do any walking, at least once per week	2014/15	80.6	78.4	77.3
Percentage of adults who do any cycling, at least three times per week.	2014/15	4.4	3.4	1.1
Percentage of adults who do any cycling, at least once per month	2014/15	14.7	12.7	6.5
Utilisation of outdoor space for exercise/health reasons	Mar 2014 Feb 2015	17.9	15.8	15.3

Figure 22 BwD Physical activity dataset compared to North West & England Public Health Outcomes Framework (2016)

When looking at the new active travel indicators only 45.3% of adults do any walking 5 times a week and almost a quarter of adults do not walk at all. Cycling figures for the borough are very poor with only 1.1% cycling 3 times a week and 6.5% cycling at least once a month versus 4.4% and 14.7% nationally.

The cost of physical inactivity to the local economy amounts to £3,206,550 or £2,071,723 per 100,000 population (£1,817,285 nationally).[176] This expenditure is clearly unsustainable and the development of this strategy is essential in reducing the cost to the individuals, communities and the public purse.

6. Assets, Challenges & Insights

As already highlighted earlier, Blackburn with Darwen faces a number of challenges when addressing the health of the population and in changing behaviour of individuals and communities however the borough has a wide variety of assets of which it can be proud and all of which can assist in the delivery of this strategy.

6.1 Assets

6.1.1 Physical and Geographical

Blackburn with Darwen has a variety of parks and open spaces within its borders including 14 formal parks and gardens the largest park of which being Witton Country Park. Blackburn with Darwen is also well situated geographically in Lancashire to access many other parks and open spaces outside the borough for recreational purposes. The recent Pennine Reach project with improved transport links and the reopening of the Todmorden Curve has extended the transport links to open up more possibilities across Lancashire and into Yorkshire and covers both green and blue spaces including the coast along with urban and rural open spaces.

Witton Country Park encompasses a variety of opportunities for physical activity including Witton Park Arena, Cycle Hub, grass and all weather pitches, play areas, woodland and farmland. There are designated, well signposted routes for walking and cycling in the 480 acre site. However there are many other Green Flag parks and many other high quality parks and open spaces across the borough including the River Darwen Parkway, allotments and a number of formal and informal play areas for children and young people.

Witton Country Park has been identified as the natural starting point of the Weavers Wheel[177] which is a 26km circular route with a further 66km of route will be signed to create several 'spokes' and 'spurs' to connect the Wheel into Blackburn Town Centre as well as various neighbouring towns and employment sites. It is intended that the Weavers Wheel will be the start of a strategic cycle network for Blackburn with Darwen and East Lancashire and encourage more active travel along with recreational cycling.

6.1.2 Community & Volunteers

Both mottos of Blackburn – 'Arte Et Labore' - and Darwen – 'Absque Labore Nihil' - are indicative of the resilience and attitude of the people of Blackburn with Darwen in that by hard work, perseverance and skill great things can be achieved. Communities in both towns are built on these mottos and strong networks of community groups and volunteers exist that empower those around them to contribute positively and live a fulfilled life.

Locality teams are at the heart of the people and are able to pass on messages to their communities in a non-threatening, non-judgemental way. There is a strong network of third sector organisations which work with residents across the life course and well established access points for information – Your Support Your Choice[178] and the Wellbeing service[179]. Blackburn with Darwen Council supports the Your Call campaign to enable residents to make a difference in their community from a call to shop locally to taking action on road safety and by taking pride in the borough and working together to make it a safer, healthier and happier place to live, work and play.

There is an extensive network of volunteers who support a variety of activities including Couch 2 5ks, Park Run, Young Weavers, the re:fresh programme of activities, Age UK, local sports clubs and many more. This network of volunteers is becoming more and more important in the sustainability of population level physical activity and will be reflected and recognised within the borough's new Volunteer Strategy.

6.1.3 Sport & Leisure Sector

Blackburn is a proud footballing town with Blackburn Rovers having a long history being a founder member of the Football League. Blackburn Rovers fan base extends beyond the boundaries of Blackburn with Darwen and attracts fans and visitors form far and wide. The power of the football club brand can transcend the game and be used to engage a large number of people in the borough and beyond to improve their health. Other sporting brands with large fan bases include Blackburn Hawks Ice Hockey and Blackburn Harriers Athletics Club both of which have the ability to influence residents in the benefits of a healthy lifestyle.

Blackburn and Darwen have a number of sporting heroes, both current and past, for children and young people to aspire to. Engaging with these sporting heroes to endorse the strategy has the potential to encourage more residents to become more active and to eat well.

The local community sports forum is a well-established group who are working towards being constituted to enable them to attract funding to develop the volunteer network and support and develop the children, young people and adults who attend the clubs.

Blackburn with Darwen has an extensive network of cycling enthusiasts who develop cycling opportunities for local residents through Ride Social and Breeze Rides which is in partnership with British Cycling. These networks work to further encourage and assist Groups to grow organically including: Friendly cyclists, Bus Stop Bikers and the Young Weavers.

Blackburn with Darwen has a variety of leisure facilities including Blackburn Sports and Leisure Centre, Darwen Leisure Centre, Witton Park Arena – including athletics track, Shadsworth Leisure Centre, Audley Sports Centre, Daisyfield Swimming Pool, Blackburn Rovers Indoor Centre – with plans for expansion in the near future, secondary schools sports hall and gym facilities and multi-use games areas amongst many other facilities.

The re:fresh scheme was introduced in 2008 to tackle Blackburn with Darwen's poor health statistics and low levels of physical activity. The Council and the Care Trust Plus entered into a unique partnership to deliver a programme of free physical activity to people who lived, went to school, registered with a GP or worked in Blackburn with Darwen. The re:fresh scheme has contributed greatly to the increase in physical activity levels over the last eight years and even though a small fee has been introduced for some activities the scheme remains one of the most heavily subsidised leisure scheme in the area and has been able to encourage participation from all age and socioeconomic groups.

6.1.4 Healthy Settings – Homes, Education, Workplaces and Health & Social Care Settings

There is a large network of educational establishments at the heart of communities in the borough including 13 Children's Centres, 63 primary schools, 17 secondary schools, Blackburn College and University Centre and a number of other Higher Education centres all of which can play a role in the community to encourage intergenerational activity, to empower families and communities to make behaviour changes and to become a trusted hub of information and activity.

Social Housing providers Twin Valley Homes and Great Places manage around 9,000 homes in Blackburn with Darwen and have access to some of the most deprived and vulnerable residents. Working with key contacts within these organisations may enable those most at risk of poor health to receive information and support at a time when they are ready to make changes to their lifestyles. The workforce within these organisations is important in passing on simple messages about physical activity and access to good food as appropriate.

Blackburn with Darwen has a large programme of regeneration attracting new business and supporting existing businesses. The Hive, Blackburn with Darwen's Business Leader Network alongside the BwD WorkWell programme can reach a large number of employees to reinforce healthy lifestyle messages and provide support and signposting to activities within the borough.

Care settings – including the Royal Blackburn Hospital, Health centres, GP surgeries, care homes and domiciliary care providers, presents lots of opportunities for passing on healthy lifestyles messages and encouraging behaviour change. This social movement can affect both the large workforce and the people who visit and receive care in these settings with the potential for change on a wide scale.

6.1.5 Health & Social Care Opportunities

The Healthier Lancashire programme brings opportunities across the Pennine Lancashire footprint and beyond in recognising the importance of prevention and early intervention as opposed to a treatment based health and social care system. As already described in great detail good nutrition and physical activity are the cornerstones of living a healthy life along with the wider determinants of health and should be a priority in the new health and social care system.

Health care professionals play an important role in promoting behaviour change and are in a powerful influencing position as reflected in the recent public consultation. The recognition of this influence and the development of the competences in behaviour change amongst the workforce through Making Every Contact Count[180] programme have the potential to empower 'patients' and their families. Blackburn with Darwen has a very dedicated

and passionate healthcare workforce delivering high quality programmes of support and care and this is a network that can really make a difference across the population.

6.2 Challenges

6.2.2 Demographics

Blackburn with Darwen is a deprived borough with significant pockets of deprivation and high levels of child poverty. In these areas behaviour change can be a real challenge. An ageing population and a large under 20 population will present public health challenges in future years and this compounded with low levels of physical activity will place further pressure on the health and economic systems in the borough.

6.2.1 Health Statistics

Overweight and obesity rates across the population are high and of most concern as the doubling of obesity from reception to Year 6 age pupils and dental health rates are amongst the worst in the country. There is also a cohort of underweight young people who are also at risk of health problems. CVD rates across the borough and hip fracture rates in over 80's are higher than the national average and healthy life expectancy is particularly poor in men in the borough.

6.2.3 Geography

The topography in Blackburn with Darwen could be a barrier for many people looking to start walking and cycling with many areas of the borough having challenging inclines to tackle and may be an explanation as to the very poor cycling participation rates in the borough. The weather in the area is also inconsistent and again can be cited as a barrier for being more physically active.

6.2.4 Budgets

Blackburn with Darwen has been through a difficult time and it will continue to be difficult. Spending cuts mean that Council services have changed forever and level of service provided will no longer be at previous levels though needs are still there. Public Health grants from the Department of Health continue to be cut year on year which affects commissioning of health improvement programmes and challenges the public health team to find innovative ways to partnership work and enable low cost or no cost initiatives.

Whilst there are excellent examples of service provision across the borough there are still gaps some areas affecting consistency of access to services for parts of the borough. More could be done to ensure more effective communication and cross organisation working to increase awareness of services and avoid duplication. It is envisaged that this strategy will enable better communication, improved partnership working and avoid the duplication of services in times of budget pressures.

Budget reductions across the council have led to the introduction of a nominal fee for the re:fresh programme along with the potential introduction of car park fees at Witton Country Park. There are also a number of other

proposals for service reduction all of which may affect the implementation of parts of the proposed action plan.

6.3 Consultation and Insight

6.3.1 National Insight

The Eat Well Move More Shape Up strategy aims to support the national Sustain strategy (2015-2020)[32]. The aims and objectives of the local strategy echo those of the national strategy with practical guidance available in the '*Sustain Guide to Good Food'*[181] document which details ideas to reduce waste, ways to promote locally produced, seasonal and environmentally friendly produce, encourage the use of Fairtrade products, developing skills to 'grow your own' and ways to ensure we choose fish from sustainable sources.

There have been a number of nationally produced pieces of insight focussing on underrepresented groups which has been used to inform this strategy.

Sport England's '*This Girl Can'* campaign was developed from the insight provided by the '*Go Where Women Are'*[182] and provides detailed insight into barriers and motivators and how better to engage with women and girls.

Recent publications by Women in Sport[183] into keeping women motivated over the autumn and winter, which is traditional 'drop off' point also provides some valuable insight to support that of Sport England.

'*Changing the Game For Girls: In Action'*[184] and Women's Sport and Fitness Foundation '*Changing the game for girls'*[185] are specific insight reports for girls in addressing the low levels of physical activity in girls generally but also in addressing the traditional drop off points in the transition from primary to secondary school and low participation throughout secondary school. By providing education for staff around the issues of participation, helping schools maximise the student voice, drawing on the power of peer support and ensuring the right opportunities are available for the least active it may be possible to increase participation in sport and physical activity. Both the Sport England '*Go Where Women Are'* report and these two reports for girls provide valuable information as to how to motivate women and girls to be more active and this insight will be reflected in the action plan.

The 2012 '*Move It'* report[186] into young people's participation in sport paved the way for the changes in the way Sport England direct their resources. 'Towards and Active Nation will focus on getting those who are inactive to become physically active and encourage new and innovative partnerships to deliver programmes across the life course and recognises that increased participation is not driven by elite sport but by increasing participation in lifestyle activity.

Sport England's 2014 Youth Insight[187] details the need for a more diverse provision of sport to meet the needs of teenagers who do not wish to engage in competitive sport. There is a shift towards recreational and lifestyles participation and young people seek a meaningful experience from activity which allows them to engage with peers in a social environment. New or

unusual sports can break the norms of sport participation and can level the playing field for participation.

Early exposure to outdoor activities such as walking, rambling, cycling, orienteering, running, water sports etc. can make a lasting impression. More who are introduced to outdoor activities as children and adolescents grow up to choose and active outdoors lifestyles. Evidence suggests that participants in health referral exercise programmes based in outdoor green environments are more likely to continue with their programme than if it is based within a gym or leisure centre therefore this should be considered as a development for the Healthwise programme moving forward to support improved adherence and outcomes. However there are many perceived barriers to participation in outdoor activity including cost, time, confidence, distance to activities and lack of opportunities and for older people there was a concern over mobility levels, safety and inclement weather.[188] The characteristics of those who are most likely to be active outdoors live in more affluent areas, are employed, male and white British.[189] Breaking down some of the perceptions around accessibility of outdoor activities for the less represented groups may help to increase participation. Bringing cycling taster activities closer to the more deprived neighbourhoods may encourage people to become involved in outdoor activity. Better engagement with local clubs that offer outdoor activities may provide more opportunities and widen the demographics of participation and allow people to engage longer term.

18.4 million people in the UK have a long standing disability or illness and the North West region has the second highest proportion of people living with a disability in the UK. Four out of five disabled people are currently not active but research suggests that 70% want to increase the level of activity they currently take part in.[190] The English Federation of Disability Sport and Sport England completed insight work with disabled people and their families and carers into effective engagement and communication.[191] [192]Key findings from this work will be used to inform the action plan in more effective communication with disabled people and in ensuring the provision of activity opportunities is fit for purpose. An important aim will be to engage more disabled people in being a physical activity champion and inspiring others to become more active and to provide the support for more disabled people to become activity leaders. Further work into better inclusion of disabled people into existing provision rather than creating new, specific sessions which may be seen to be divisive rather than inclusive is needed to offer different options for people. Further local insight work with disabled people, their families and local organisations will be required to map out current provision and to develop activity opportunities as identified during the consultation work.

Promoting effective partnerships will be the key to increasing activity levels in Blackburn with Darwen. As public funding cuts force services to be trimmed back and in some cases stopped completely it is even more crucial that organisations do not work in silo or duplicate programmes of activity. UK Active's recent report on engaging with the health sector around physical

activity[193] provides some insightful case studies for best practice which can be woven into the action plan. UK Active's '*Blueprint for an Active Britain*'[194]provides a detailed plan for policy development to address physical inactivity across the life course. The action plan which accompanies Blackburn with Darwen's Eat Well Move More Shape Up strategy includes many of the recommendations within the '*blueprint*' to support an increase in participation in physical activity and will draw upon community and workforce development and mobilising the many previously discussed assets to get the residents of the Borough moving more often.

The national play strategy[195] which was released in 2008 had a long term vision for 2020 to provide more places to play, playing safely and embedding play in local priorities and whilst this is now an old document the insight work done with children and young people can be very informative for the Eat Well Move More Shape Up action plan in terms of barriers and enablers for safe outdoor play.

During the consultation the main barrier to outdoor play was a lack of places to go and things to do followed by concern for their own safety, the cost of play activities and a preference to stay at home. Other reasons included bad weather, their parents' and carers' reluctance to allow them out to play, difficulties in travelling to play areas and a lack of people to go with. The greatest barrier identified by 8–13 year olds was a lack of safe and clean play areas near to their homes. They wanted to have more interesting things to do such as better play equipment and activities, places to meet friends and school grounds to use outside school hours. Designating specific areas in which children can play in was considered to be the best way to prevent them being stopped from playing for no reason. Safety was a key factor affecting children's enjoyment of their playtime, with most wanting safer play areas and roads.

As traditional play areas are under review due to budget cuts, a more innovative approach to safe places to play will be required. Use of non-traditional spaces such as car parks, requesting schools consider the use of their spaces out of school hours where appropriate, particularly for supervised activities and encourage and support local residents and community groups to apply for funding which may become available to maintain play areas. Options for safe street play will also be explored through temporary street closure orders in consultation with residents in the area and the local children and families. A pilot street play programme of activities could be offered and evaluated before deciding on wider roll out across the Borough.

The recently released '*Childhood Obesity: A Plan for Action*' [196] is a 14 point plan designed to reduce levels of obesity in children. Of those within the scope of this strategy's action plan are

- Supporting early years settings with food and physical activity provision

- Supporting primary schools in ensuring the coordination and delivery of quality sport and physical activity
- Encouraging primary schools to develop a framework to achieve optional 'healthy' rating in the changes to the Ofsted report
- Making school food healthier

The plan also calls for the public sector to ensure healthy options are available in their buildings including hospitals, leisure centres etc. Intervention in vending and food procurement will be included in the Local Authority Declaration on Healthy Weight which is large part of the Shape Up action plan.

6.3.2 Local Insight and Consultation

Extensive consultation has taken place over the last 18 months with the initial phase of consultation forming the strategic aims and objectives of the strategy and the second phase of consultation developing the action plan with input from the public, stakeholders including the health sector and executive members.

Blackburn with Darwen's Public Health Department recognised that there was very limited insight and information about the people of the borough accessing food banks and the circumstances in which they did this. A plethora of anecdotal evidence was available but a lack of evidence based information to support this restricted the true picture of food insecurity within the Borough. In late 2014, the local authority's Culture, leisure, Sport and Young People's Department were commissioned to co-ordinate and oversee the Dragon's Apprentice, the full recommendations of which are detailed in appendix ii. In summary there appears to be a need for education around food poverty amongst communities and healthcare professionals to ensure equity of access to all and to help to reduce the stigma associated with seeking assistance with access to food. The formation of a strategic food poverty network will assist in mapping all existing provision which supports the food poverty agenda and inform future work to tackle food poverty in the Borough.

Consultation has taken place with primary school catering managers and there was a genuine concern about the amount of sugar children were having in their diets and the apparent lack of education of both children and parents. The multicultural nature of schools in the borough and the varying diets experienced at home bring some challenges with the some managers giving examples of children who come from a variety of backgrounds who will not eat the school meals as they did not recognise the foods. Further examples around food used as rewards and the lack of packed lunch guidance highlight the requirement of school food policies. Changes have already begun to happen in some schools as a result of the session with some schools already having 'pudding free' days and 'no added sugar' days. There was a genuine commitment to try to influence schools food plan wherever possible with the support of the schools catering manager with the support of public health.

Online public consultation highlighted the appetite for a variety of family activities in parks and open spaces and more opportunity to be active in a social group. There was good support for community food growing, couch to 5ks and the mile a day initiative in schools. There was a very strong feeling in both the public consultation and the health professionals consultation that sugar is a cause for concern in terms of obesity and dental health and should be a focus within the action plan.

Two ladies only groups were consulted at Bangor Street Community Centre and Audley and Queens Park Neighbourhood Learning Centre (Women 4 Women group – Inter Madrassah Organisation) and a number of suggestions around communicating messages and encouraging increased physical activity were made some of which are discussed below.

Both groups of ladies cited fun and social activities as something that would motivate them along with game based family activities. The ladies also enjoy being active in parks and open spaces but found that safety was an issue for them and would prefer to access them during the day. The ladies feel that opening school facilities for family use may encourage more families to be active as those schools are within easy reach of their homes and community 'pester power' works very well in their community. They also felt that schools could play a role in educating the parents as well as the children and could host family learning sessions where they felt many parents would attend. The suggestion of better use of the Asian television and radio channels as a good way to communicate health messages will be explored through the action plan. With a large percentage of the community watching the Ummah channel or listening to local radio networks this may be an effective way to pass on healthy lifestyle messages.

A recent consultation with young people in Blackburn with Darwen conducted on behalf of Healthwatch provides a snapshot of their perception of health services in the borough. [197] Almost a third recognised food and a healthy diet as an important factor in having good health and almost 15% recognised physical activity, including both sport and exercise, as being important. The young people consulted also recognised that community leisure facilities, parks and open spaces and sports and physical activity were the places or things that made it easiest for them to look after themselves and feel good. A quarter of those young people identified takeaways and fast food as being the things that make it most difficult to be healthy citing them as too tempting and too easily available.

70% of young people who took part in the insight stated that if they needed help they felt that they could get it from home, school, friends and family. Effective communication with young people varies widely between social media, video media such as You Tube, face to face and visual media. Only a small percentage cited print media such as leaflets as being the format they

preferred communication to be delivered but social media is still the most popular method of communicating messages.

A large number of older adults were consulted via the Older Person's Forum and Age UK and there was an overwhelming number that cited that transport was an issue in accessing services particularly with reducing bus services. More locality based sessions were seen to be important but also being able to access parks and open spaces for activities was thought to be important. Older people enjoy activities such as dancing and tai chi and would like to see more of these available in the community. Making activities fun and social with appropriate music will motivate people to attend and to keep coming back in the long term. There was a suggestion that a handbook which contains all the activities available for older people in the Borough would be very useful and would encourage more people to try new activities. The main theme running through discussions around food and nutrition were the issues of cooking for one and the loss of motivation for cooking and eating well, particularly after illness. Identifying those people within the community who love to cook and may be able to make an extra meal and support and encourage others those who have lost their interest in food to find their enjoyment in cooking again, helping to address social isolation. Training and support for domiciliary care workers was thought to be a way to support people to eat more healthily and be having nutritious meals.

Full details of all the consultations carried out can be found in appendix ii and all information gleaned from these will be woven into the action plan.

7. Action Plan

8. Appendix

Eat Well Move More Shape Up Strategy Steering Group Membership

Blackburn with Darwen Borough Council

- Public Health (Chair and minutes)
- Commissioning & Procurement Services
- Communications – Corporate Services
- Culture, Leisure Sport & Young People
- Early Years
- Environment
- Localities & Prevention
- Planning & Prosperity
- Public Protection
- Services to Schools
- Transport Team

Blackburn with Darwen Clinical Commissioning Group

Lancashire Care Foundation Trust

- Healthy Child Programme – Health Visitors & School Nurses

East Lancashire Hospitals Trust

- Nutrition Department
- Physiotherapy Department
- Specialist Infant Feeding Team

Voluntary, Community and Faith Sector

- Age UK Blackburn with Darwen
- Blackburn Rovers Community Football Trust
- Blackburn with Darwen School Games Organiser
- Blackburn Youth Zone
- Canal & River Trust
- Families Health & Wellbeing Consortium
- Inter Madrassah Organisation
- Lancashire Mind
- Lancashire Sport
- Newground
- Together Lancashire

Strategy Consultation

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