

APPENDIX B

Members are asked to note that the draft “Oldham Healthy Weight and Physical Activity Strategy” was drafted in the pre-Covid period and will need to be re-visited to reflect policy changes over this period and any new or enhanced focus on obesity related issues prior to consultation. The Public Health work programme remains focused on the immediate response to the Covid-19 pandemic and there is no current timescale for the review of the draft Strategy.

OLDHAM HEALTHY WEIGHT AND PHYSICAL ACTIVITY STRATEGY

2020 – 2025

Table of Contents

1	Introduction.....	2
2	Context of the strategy.....	3
2.1	What is excess weight?	3
2.2	What is Physical Activity and Inactivity?.....	3
2.3	National context.....	4
2.3.1	Unhealthy weight	4
2.3.2	Physical inactivity.....	5
2.4	Why is unhealthy weight and physical inactivity an issue?.....	6
2.4.1	Health impact.....	6
2.4.2	Economic impact	6
2.5	Unhealthy weight in Oldham	6
2.5.1	Unhealthy weight in Oldham children.....	6
2.5.2	Unhealthy weight in Oldham adults.....	7
2.6	Physical inactivity in Oldham.....	7
3	Vision and Delivery	8
3.1	Our vision	8
3.2	Delivery themes.....	8
3.2.1	Theme 1: Thriving communities which enable and encourage people to be physically active and eat well and promote health and wellbeing.	8
3.2.2	Theme 2: Encourage and support Oldham residents to achieve and maintain healthy weight and increase levels of physical activity.....	10
3.2.3	Theme 3: Create an environment that makes being physically active and eating healthily the easier choices	12
4	How do we know we are making a difference?	15
4.1	Governance.....	15
4.2	Population Outcomes.....	15
4.2.1	Healthy nutrition outcomes	15
4.3	Physical activity outcomes	15
4.4	Excess weight outcomes	15
5	References	16

1 Introduction

Overweight and obesity are a major public health challenge globally and in the UK obesity levels are increasing - it is estimated 60% of the population would be clinically obese by 2050.¹

Overweight and obesity are a complex problem with many drivers, including our behaviour, environment, genetics and culture but the tendency to develop weight problems is influenced mainly by the balance between food energy intake on one hand, and energy expenditure through the body's metabolism and physical activity on the other.

Overweight and obesity, also referred to as excess weight, can significantly influence the development of serious health conditions such as cancer, coronary heart disease, type 2 diabetes, and vascular dementia, and can significantly reduce life expectancy.²

This Healthy Weight and Physical Activity Strategy is informed by the Oldham Locality Plan for Health and Social Care Transformation 2019-2024 which sets out our vision to make Oldham a place where improved health and wellbeing is experienced by all, and where the health and wellbeing gap is reducing.

The strategy takes a collaborative approach, focusing on prevention and early intervention, and reducing health inequalities, which are key themes within the 2019 – 2024 Oldham Locality Plan.

2 Context of the strategy

2.1 What is excess weight?

Excess weight in children and adults is categorised into 'overweight', 'obese' and 'morbidly obese', and the unit measure is the Body Mass Index (BMI).

Excess weight in children is calculated based on the BMI taking into account the child's age and gender. Table 1 shows the weight classifications used by the National Childhood Measurement Programme (NCMP). Children over the 85th centile are considered overweight and those over the 95th centile, obese.

Table 1: UK National BMI percentile classification for a child*

Classification	BMI Centile
Underweight	≤ 2 nd
Healthy weight	2 nd – 84.9
Overweight	84.9 – 94.9
Obese	≥ 95 th

**The thresholds are those conventionally used for population monitoring and are not the same as those used in a clinical setting where overweight is defined as a BMI equals or greater than the 91st but below the 98th centile and obese is defined as a BMI equals or greater than the 98th centile.*

Table 2 shows adult BMI classifications based on NICE Guidance.³ Excess weight is equivalent to BMI of 25 or higher.

Table 2: NICE BMI classification of overweight and obesity in adults

Classification	BMI Centile
Underweight	<18.5
Healthy weight	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	30.0 – 39.9
Morbidly obese	>40

2.2 What is Physical Activity and Inactivity?

The World Health Organisation (WHO) defines physical activity as any bodily movement produced by skeletal muscles that requires energy expenditure – including activities undertaken while working, playing, carrying out household chores, travelling, and engaging in recreational activities.⁴

Physical inactivity is defined as engaging in less than 30 minutes of physical activity per week.⁵ The 2019 [UK Chief Medical Officers' Physical Activity Guidelines](#) recommend that each week, children and young people achieve an average of at least 60 minutes per day of moderate and

vigorous physical activity (MVPA), adults should accumulate at least 150 minutes of moderate intensity activity; or 75 minutes of vigorous intensity activity (see Table 3 for details).

Table 3: Summary of 2019 UK Chief Medical Officers' Physical Activity recommendations

Age group	Guidance
Toddlers (1-2 years)	Toddlers should spend at least 180 minutes (3 hours) per day in a variety of physical activities at any intensity, including active and outdoor play, spread throughout the day; more is better.
Pre-schoolers (3-4 years)	Pre-schoolers should spend at least 180 minutes (3 hours) per day in a variety of physical activities spread throughout the day, including active and outdoor play. More is better; the 180 minutes should include at least 60 minutes of moderate to vigorous physical activity.
Children and young people (5-18 years)	Children and young people should aim to be physically active for an average of at least 60 minutes of MVPA per day across the week. This can include all forms of activity such as physical education, active travel, after-school activities, play and sports.
Adults (19-64 years)	Each week, adults should accumulate at least 150 minutes (2½ hours) of moderate intensity activity (such as brisk walking or cycling); or 75 minutes of vigorous intensity activity (such as running); or even shorter durations of very vigorous intensity activity (such as sprinting or stair climbing); or a combination of moderate, vigorous and very vigorous intensity activity.
Older adults (65 years or older)	Each week older adults should aim to accumulate at least 150 minutes of moderate intensity aerobic activity, building up gradually from current levels. Those who are already regularly active can achieve these benefits through 75 minutes of vigorous intensity activity, or a combination of moderate and vigorous activity, to achieve greater benefits.

2.3 National context

2.3.1 Unhealthy weight

Population obesity levels are on the increase nationally. The Foresight Report¹ estimated 60% of the adult population would be clinically obese that by 2050, with those from poorer communities and minority ethnic backgrounds being affected significantly more. It is also estimated that 7.1% of deaths are attributable to elevated BMI in England and Wales in 2014 amounting to an average of 12 years lost by an individual.⁶

In England:

- 10.0% of boys in Reception are obese compared to 9.4% of girls.⁷
- 22.5% of boys in Year 6 are obese compared to 17.8% of girls.⁷
- 1.0% of Reception year children are underweight compared with 1.4% among Year 6 children.⁷
- Children from most deprived backgrounds are more likely to be overweight or obese:⁷

- Reception: 27.2% of those from the most deprived areas are overweight or obese compared with 17.3% from the least deprived areas
- Year 6: 41.5% of those from the most deprived areas are overweight or obese compared with 24.1% from the least deprived areas.
- 62.0% of adults are overweight or obese.⁸
 - 68.3% of men are overweight or obese compared to 55.4% of women
 - People from Black ethnic groups (72.8%) are most likely to be overweight or obese while Chinese (34.5%) least likely.
 - Those from most deprived areas are most likely to be overweight or obese (67.4%) while those from the least deprived are least likely (56.4%).

2.3.2 Physical inactivity

The proportion of physically active adults have remained static at around 66%* over the recent past (2015/16 – 2017/18) in England.⁹ Insufficient physical activity is the 4th leading risk factor for global mortality accounting for 6% of deaths globally¹⁰ and a 25% decrease in physical inactivity could lead to 1.3 million global deaths prevented annually.¹¹

In England:

- 46.8% of children aged 5-16 years undertake the recommended minimum of 60 minutes physical activity a day.¹²
 - 51% of boys are physically active compared with 43% for girls.
 - Those from low income families are the least likely to be active (42% compared with 54% in those from most affluent families).
 - Children and young people with a disability or long-term health condition are more likely to be less active than those without.
 - Children and young people from Asian and Black ethnic backgrounds are the most likely to be less active.
- 63.2% of adults aged 16 years or older undertake at least 150 minutes of activity a week.¹³
 - 65% of men undertake at least 150 minutes of physical activity a week compared with 61% of women.¹³
 - Disabled adults are twice as likely to be physically inactive compared to non-disabled adults (41% are inactive in those with disabilities compared with 20% in those without).¹³
 - Minority ethnic groups have lower physical activity participation rates – this is most marked among Bangladeshi and Pakistani women.¹⁴
 - 11% of Bangladeshi and 14% of Pakistani women reportedly undertaking the recommended amounts of physical activity compared to 25% in the general population.

* % doing at least 150 moderate intensity equivalent (MIE) minutes physical activity per week in bouts of 10 minutes or more in the previous 28 days expressed (19+).

2.4 Why is unhealthy weight and physical inactivity an issue?

2.4.1 Health impact

- Excess bodyweight is an important risk factor for developing cardiovascular disease and type 2 diabetes.¹⁵ Persons with obesity are also more likely to develop joint problems (osteoarthritis),¹⁶ as well as complications following surgeries.¹⁷
- Obese individuals are more likely to experience bullying, low self-esteem, perception of poor body image, anxiety and depression all of which could lead to impaired social interaction.¹
- Years of life lost associated with being overweight is estimated to be 3.3 years. For those obese or severely obese the loss in life expectancy is estimated to be 5.6–7.6 years for men and 8.1–10.3 years women aged 20–29 years.¹⁸
- Being underweight is associated with nutritional deficiencies, weakened immune system, fertility problems,¹⁹ and coronary heart disease.²⁰
- Physical inactivity is the principal cause for approximately 21–25% of breast and colon cancer burden, 27% of diabetes burden and approximately 30% of ischaemic heart disease burden.¹⁰

2.4.2 Economic impact

- The overall cost of excess weight to the wider UK society is estimated to rise to £37.2 billion by 2035 and 49.9 billion by 2050 from £27 billion in 2015.^{1,21}
- The estimated NHS cost attributed to managing excess weight is forecast to rise to £8.3 billion in 2025 and £9.7 billion in 2050 from 6.3 billion in 2015.^{1,22}
- Lack of physical activity costs the UK around £7.4 billion a year including over £0.9 billion to the NHS.¹⁴

2.5 Unhealthy weight in Oldham

In tandem with national trends, the burden of excess weight and related health problems are on the increase in Oldham.

2.5.1 Unhealthy weight in Oldham children

There has been an overall increase in the proportion of Reception year and Year 6 children who are overweight or obese in Oldham. 2018/19 National Child Measurement Programme (NCMP) data²³ shows:

- 23.4% of Reception year children are overweight or obese compared with the regional and national averages of 24.4% and 22.6% respectively.
- 37.4% of Year 6 children are overweight or obese compared with the regional and national averages of 35.9% and 34.3% respectively.
- 1.2% of Reception year children are underweight compared with regional and national averages of 0.8% and 1.0% respectively.
- 1.4% of Year 6 children were underweight compare with regional and national averages of 1.1% and 1.4% respectively.

2.5.2 Unhealthy weight in Oldham adults

The 2017/18 Active People Survey²⁴ estimates showed that 67.1% of adults aged 18 years or older in Oldham have excess weight (i.e. they are either overweight or obese), compared with the England average of 62.0%. There has been a year-on-year increase between 2015/16 and 2017/18. There are no estimates available for underweight among adults in Oldham.

2.6 Physical inactivity in Oldham

The [Sports England Active Lives Survey](#) shows that in Oldham:^{12,13}

- 29.7% of children aged 5-16 years are physically active[†] compared with 43.3% in England.
- 56.0%[‡] of adults aged 16 years or older are physically active (compared with 63.2% in England), more than 10 percentage point reduction from 2015/16 figure of 61.6%.

Draft

[†] 2017/18 data reported as there were no data for Oldham for the 2018/19 survey

[‡] 2018/19 data from the adults' survey

3 Vision and Delivery

3.1 Our vision

- Oldham will be a place where both the environment and our services promote and support health and wellbeing, encouraging and enabling everyone to be physically active and eat well in order to achieve and/or maintain a healthy weight.

3.2 Delivery themes

3.2.1 Theme 1: Thriving communities which enable and encourage people to be physically active and eat well and promote health and wellbeing.

3.2.1.1 Why is Theme 1 important

- Community norms and culture play an important role in existing patterns of participation in programmes and are important factors to consider in developing interventions and strategies to increase physical activity and healthy weight.²⁵
- Co-production involving local communities can promote resilience, autonomy, save time and resources, and improve efficiency.²⁶
- Community participation in programmes can:^{27,28}
 - Improve access to services, make services more relevant and culturally appropriate.
 - Help mobilise community resources and energy, develop more holistic and integrated approaches.
 - Contribute to better decision making and ensure ownership and sustainability of programmes, and actively empowering communities.

3.2.1.2 Strategic objectives (Theme 1)

- **Develop community capacity to promote, encourage and support healthy eating, healthy weight and physical activity**
 - **Examples of what is happening already**
 - **Sports England Local Delivery Pilot** in Glodwick & Failsworth to promote physical activity among residents.
 - **Get Oldham Growing** which aims to support residents to be more active and get involved in food growing
 - **Oldham Walking Network**, a group of individuals from various organisation, with an aim to promote walking within their organisations.
 - **Holiday Hunger Project** which provides healthy meals for children during school holidays
 - Thriving Communities Social Action Fund Projects e.g.
 - BAME Project promoting physical activity
 - WiFi NW Project running cooking courses

- Street Angels providing hot meals for the homeless and reducing social isolation
 - Community-led weight management support such as ***Slimming Without Women***.
 - Organised physical activity sessions e.g.
 - parkruns and junior parkruns operating every week in the borough
 - Daily Mile initiative which encourages children to run or jog for 15 minutes every day in their primary and nursery schools
 - Park & Environmental services organises health walks and planting activities for wellbeing
- **What we will do in addition**
 - Increase reach of and participation in existing local programmes and reduce inequalities
 - Use learning from the Local Delivery Pilot to continue developing community capacity to support physical activity
 - Develop more community growing spaces through Get Oldham Growing and Northern Roots
- ***Ensure the best start in life for all children and young people growing up in Oldham***
 - **Examples of what is happening already**
 - Promoting healthy infant feeding practices e.g.
 - UNICEF Baby Friendly Accreditation in the community settings (Health Visiting and Children's Centres) to promote best infant feeding practices
 - Breastfeeding support groups (Baby Bistros) and Breastfeeding Welcome schemes
 - Healthy weaning sessions in Children Centres promoting introduction of healthy food to infants
 - Healthy Start programme: a government-funded scheme to support low-income families feed their infants healthily
 - Sport through Play (SPLAY) for under-5s to promote physical activity skills among young children. The programme aims to teach physical literacy skills to children in preparation for primary school.
 - Stay and Play sessions in Children's Centres: These are interactive sessions for parents/carers and their toddlers incorporating physical activities into learning and play
 - StoryWalk being delivered by Oldham Library. This programme combines physical activity with book-related activities and provides children with opportunities to develop literacy skills while playing and undertaking healthy outdoor physical activities.

- Subsidised Parent and Baby swim sessions in all OCL pools plus “Bumps & Beyond” pre- and post-natal exercise classes at Royton Leisure Centre.
- **What we will do in addition**
 - Maintain UNICEF BFI Accreditation in community settings ([Sustainability standards and the Gold Award](#))
 - Achieve UNICEF BFI Accreditation in the maternity setting
 - Improve the uptake of breastfeeding and healthy weaning services and Stay and Play sessions in Children’s Centres
 - Improve uptake of the Healthy Start programme
- ***Raise awareness, promote and encourage healthy eating, healthy weight and physical activity***
 - **Examples of what is happening already**
 - Participation in national and regional campaigns e.g. National Breastfeeding Awareness Week, Sugar Smart and Change4Life.
 - Sports Development Department work in schools promoting health through termly health messages linked to national campaigns
 - **What we will do in addition**
 - Develop Oldham version of GM That Counts campaign
 - Develop a communications plan to amplify national campaigns in Oldham e.g. National Obesity Awareness Week
 - Organise Oldham Walking Festival annually
 - Annual Pharmacy campaign schedule to include promotion of healthy weight and physical activity

3.2.2 Theme 2: Encourage and support Oldham residents to achieve and maintain healthy weight and increase levels of physical activity

3.2.2.1 Why is Theme 2 important?

- Maintaining a healthy weight can prevent 14% of cancer-related deaths in men and 20% in women²⁹ and reduce the chances of one developing type 2 diabetes and heart problems.
- Being physically active can:³⁰
 - Reduce risk of stroke and other vascular events by 20% to 35%
 - Reduce risk by 30% to 40% lower risk of metabolic syndrome and type 2 diabetes
 - Reduce risk by 40-50% of developing colon cancer and breast cancer by 20%
 - Reduce the risk for depression and dementia by 20% to 30%
 - Reduce the risk of falls by 30% and that of hip fracture by 36% to 68%.
- In Oldham obesity and physical inactivity levels are higher than national average.

3.2.2.2 Strategic objectives (Theme 2)

- **Ensure an integrated offer of health promotion and support across all services to enable and encourage residents maintain healthy weight and be physically active**
 - **Examples of what is happening already**
 - Weight management programmes provided by Slimming World and Weight Watchers for people who want to lose weight and do not have underlying health problems
 - Specialist weight management service provided by ABL for people with obesity and complex health problems
 - Positive Steps / Early Help service provide support and advice on healthy eating, healthy weight and being active
 - Oldham Community Leisure (OCL) provide a wide range of physical activity opportunities at 5 leisure centres across Oldham. The service been awarded a Silver Customer Engagement Award.
 - GP Exercise Referral Scheme support residents who have existing health problems and referred to OCL.
 - FRESH and FRESH MINDS programmes in primary schools promote physical activity and mental health.
 - **What we will do in addition**
 - Commission an integrated all-age weight management service for adults and families
 - Develop preventive services to promote healthy weight and physical activity among the pre-school population
 - Develop pathways and improve access to physical activity and weight management services
 - Monitor outcomes for residents supported by our services to ensure the services are meeting their needs and reduce unwarranted variations in outcomes.
- **Workforce development to ensure staff have the skills, knowledge and confidence to engage people in conversations about weight, food and physical activity**
 - **Examples of what is happening already**
 - Delivering Making Every Contact Count (MECC) which enables health and care workers to engage people in conversations about improving their health by addressing risk factors such as alcohol, diet, physical activity, smoking and mental wellbeing.
 - Health Literacy Training to improve staff confidence in engaging clients in behaviour change discussions.

- Oldham Primary Schools Health Champions scheme which supports children and young people to become health promotion advocates within schools
- **What we will do in addition**
 - Consistently promote weight management services and opportunities to be physically active and eat well using a range of print and electronic media
 - Develop workforce skills and knowledge to ensure effective conversations with residents about healthy weight and physical activity.

3.2.3 Theme 3: Create an environment that makes being physically active and eating healthily the easier choices

3.2.3.1 Why is Theme 3 important?

- Environmental factors can discourage people from becoming more active, e.g.:⁴
 - fear of violence and crime in outdoor areas
 - high-density traffic and poor air quality
 - lack of parks, pavements and sports/recreation facilities.
- The WHO recommends that policies to increase physical activity should ensure that:⁴
 - physical activity is promoted through activities of daily living;
 - walking, cycling and other forms of active transportation are accessible and safe for all;
 - workplace policies encourage physical activity;
 - sports and recreation facilities provide opportunities for everyone to do sports.
- Having a healthy diet which includes daily consumption of recommended amounts of fruits and vegetables can reduce risk of cancer-related deaths by 30% to 35%,²⁹ and the occurrence of myocardial infarction by 13.7%.³¹
- Children living in areas surrounded by fast food outlets are more likely to be overweight or obese.³²
 - Fast food outlet density in Oldham ranks 43rd highest among 326 local authorities in England[§].³³
- Fruit and vegetable consumption levels in Oldham levels are lower than national averages.
- 34.8% of 5-year-olds in Oldham have dental decay compared with 23.3% national average.

3.2.3.2 Strategic objectives (Theme 3)

- **Improve the provision of healthy and sustainable food and drink across Oldham**
 - **Examples of what is happening already**
 - Community Fridge project: This is a food waste reduction project which mainly obtain perishable food, which would have been sent to landfill, from local supermarkets, refrigerates them for use by local residents.

[§] National average not available.

- Sustainable Food Cities Bronze Award achieved: The award recognises and areas taking a joined-up, holistic approach to food and achieving significant positive change on a range of key food health and sustainability issues.
 - Community-based programmes to improve access to fresh food and vegetables and green spaces e.g. Get Oldham Growing, Holiday Hunger Project, vegetable growing programmes in schools.
 - Healthy school meals provided by the Education Catering Service has received several awards including the Silver & Gold [Food for Life Served Here Excellence Award](#)
 - Early years healthy eating award scheme which recognises healthy eating practices in early years' settings.
 - **What we will do in addition**
 - Develop a new strategic plan food for Oldham, and work towards obtaining Sustainable Food Cities Silver Award
 - Develop more community growing spaces through Get Oldham Growing and Northern Roots
 - Explore banning junk food advertisements across council-owned advertising sites
 - Support growth in local food enterprise with a focus on high quality, healthy food
 - Ban high-sugar drinks in vending machines across all OCL managed Council Leisure Centres
- ***Develop a built environment and public open spaces that encourage active travel and healthy eating***
 - **Examples of what is happening already**
 - Supplementary Planning Document (SPD) to limit concentration of fast food outlets
 - Positive Cycles' "Bike Back to Work" scheme (delivered by Positive Steps)
 - Having a workplace travel plan is a mandatory condition for business planning applications
 - Delivering GM Active Neighbourhoods project in at least one area in Oldham
 - **What we will do in addition**
 - Ensure increasing physical activity and healthy eating are key considerations in our approach to 'Creating a Better Place'
 - Review the current SPD to better support planning application decisions relating to fast food outlets and other food selling premises.
 - Develop **Streets For all Strategy**
 - Embed Active design principles in local plan e.g.:
 - Reengineer streets to give continuous footpaths/street for all B-network

- Make terraces more pedestrian friendly
 - Improve cycling routes for walking and cycling
 - Deliver the Oldham Bee Network/Made to Move proposals
 - Maintain high quality parks and open spaces and create the UK's largest urban farm and eco-park: 'Northern Roots'
- ***Develop healthy workplace schemes to encourage physical activity and healthy eating among staff and residents***
 - **Examples of what is happening already**
 - ***Fit for Oldham:*** Fit for Oldham Campaign uses the NHS 5 ways to mental wellbeing and will focus on 4 main areas;
 - Leadership
 - Working Environment
 - Healthy Behaviours
 - Work-life Balance
 - Oldham Council Cycle to Work scheme which provides facilities to support cycling e.g. bicycle repair and packing; shower
 - **What we will do in addition**
 - Implement the Government Buying Standards for Food and Catering Services
 - Establish healthy workplace accreditation scheme for employers and local businesses to sign up to and include specific healthy workplace categories in workplace/business award schemes.

4 How do we know we are making a difference?

4.1 Governance

The implementation of the strategy will be supported by an action plan which will be monitored by a Healthy Weight and Physical Activity Strategy Steering group and reviewed annually. The Steering Group will be accountable to the Oldham Health and Wellbeing Board via Thriving Communities and Health Improvement Programme (TCHIP) Board.

4.2 Population Outcomes

To assess the impact of the strategy we will monitor the outcomes listed below which are components of the national Public Health Outcomes Framework. These would be supplemented by locally collected data based on specific local initiatives in the action plan.

4.2.1 Healthy nutrition outcomes

- Breastfeeding initiation
- Breastfeeding at 6-8 weeks
- Proportion of the population meeting the recommended '5-a-day' at age 15
- Average number of portions of fruit consumed daily at age 15
- Average number of portions of vegetables consumed daily at age 15
- Percentage who eat 5 portions or more of fruit and veg per day at age 15
- Proportion of the population meeting the recommended '5-a-day' on a 'usual' day (Adults)
- Average number of portions of vegetables consumed daily (adults)
- Average number of portions of fruit consumed daily (adults)

4.3 Physical activity outcomes

- Percentage with a mean daily sedentary time in the last week over 7 hours per day at age 15
- Percentage physically active for at least one hour per day seven days a week at age 15
- Percentage of physically active adults
- Percentage of adults cycling for travel at least three days per week
- Percentage of adults walking for travel at least three days per week

4.4 Excess weight outcomes

- Child excess weight in 4-5-year olds
- Child excess weight in 10-11-year olds
- Percentage of adults (aged 18+) classed as overweight or obese

5 References

1. Government Office for Science (2007). Tackling Obesities: Future Choices – Project report.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/287937/07-1184x-tackling-obesities-future-choices-report.pdf (Accessed on 23 August 2019)
2. NHS (2019). Obesity. <https://www.nhs.uk/conditions/obesity/>
3. NICE (2014). Obesity - identification, assessment and management. Clinical guideline [CG189]. <https://www.nice.org.uk/guidance/cg189/chapter/1-Recommendations>
4. World Health Organisation (2018). Physical activity. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>
5. Cabinet Office (2015). Sporting Future: A New Strategy for an Active Nation.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/486622/Sporting_Future_ACCESSIBLE.pdf
6. Tovey M (2017). Obesity and the Public Purse. IEA Discussion Paper No.80.
<https://iea.org.uk/wp-content/uploads/2017/01/Obesity-and-the-Public-Purse-PDF.pdf>
(Accessed on 23 August 2019)
7. Public Health England (2019). National Child Measurement Profile – 2018/19
8. Public Health England (2019). Public Health Profiles – Obesity.
9. Public Health England (2019). Public Health Profiles – Physical Activity.
<https://fingertips.phe.org.uk/profile/physical-activity>
10. World Health Organisation (2010). Global Recommendations on Physical Activity for Health. <https://www.ncbi.nlm.nih.gov/books/NBK305049/>
11. Lee IM, et al. Impact of physical inactivity on the world's major non-communicable diseases. *Lancet* 2012; 380(9838): 219-229.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3645500/>
12. Sports England (2019). Active Lives Children and Young People Survey - Academic year 2018/19. <https://www.sportengland.org/news-and-features/news/2019/december/05/active-lives-children-and-young-people-survey-academic-year-201819-report-published/>
- 13 Sports England (2019). Active Lives Adult Survey May 2018/19.
<https://www.sportengland.org/media/14239/active-lives-adult-may-18-19-report.pdf>
14. Public Health England (2016). Health matters: getting every adult active every day.
www.gov.uk/government/publications/health-matters-getting-every-adult-active-every-day/health-matters-getting-every-adult-active-every-day
15. Grover SA, Kaouache M, Rempel P, et al. (2014) Years of life lost and healthy life-years lost from diabetes and cardiovascular disease in overweight and obese people: a modelling study. *The Lancet Diabetes & Endocrinology*.
[https://www.thelancet.com/journals/landia/article/PIIS2213-8587\(14\)70229-3/fulltext](https://www.thelancet.com/journals/landia/article/PIIS2213-8587(14)70229-3/fulltext)
16. Pottie P, Presle N, Terlain B, et al (2006). Obesity and osteoarthritis: more complex than predicted!. *Annals of the Rheumatic Diseases*; 65:1403-1405.

-
17. King LK et al. (2013). Obesity & osteoarthritis. *Indian J Med Res.* 138(2): 185–193. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3788203/>
 18. Lung T, Jan S et al. (2019). Impact of overweight, obesity and severe obesity on life expectancy of Australian adults. *International Journal of Obesity*, 43: 782–789. <https://www.nature.com/articles/s41366-018-0210-2>
 19. NHS (2017). Healthy weight - Underweight adults. <https://www.nhs.uk/live-well/healthy-weight/advice-for-underweight-adults/>
 20. Suastika K et al. Underweight is an important risk factor for coronary heart disease in the population of Ceningan Island, Bali. *Diab Vasc Dis Res.* 2012 Jan;9(1):75-7. doi: 10.1177/1479164111422828. Epub 2011 Oct 12. <https://journals.sagepub.com/doi/full/10.1177/1479164111422828>
 21. Public Health England (2017). Health matters: obesity and the food environment. <https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2>
 22. Baker C (2019). Obesity Statistics. House of Commons Briefing Paper Number 3336, (6 August 2019). <https://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN03336#fullreport> (Accessed on 23 August 2019)
 23. NHS Digital (2018). National Child Measurement Programme 2017-2018. <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2017-18-school-year>.
 24. Sport England (2019). Active People Survey (APS) <https://www.sportengland.org/research/about-our-research/active-people-survey>
 25. Physiopedia (2020). Physical Activity Promotion in the Community. https://www.physio-pedia.com/Physical_Activity_Promotion_in_the_Community
 26. Elwyn G, Nelson E, Hager A, et al. Coproduction: when users define quality. *BMJ Quality & Safety* 2019. doi: 10.1136/bmjqs-2019-009830
 27. Preston R et al (The benefits of community participation in rural health service development: where is the evidence? 10th NATIONAL RURAL HEALTH CONFERENCE https://researchonline.jcu.edu.au/5316/1/Preston_Preston_Rural_health.pdf
 28. WHO Regional Office for Europe. Community Participation in Local Health and Sustainable Development: Approaches and Techniques, 2002 Copenhagen Centre for Urban Health, WHO Regional Office for Europe <http://www.who.dk/document/e78652.pdf>
 29. Anand P et al. Cancer is a Preventable Disease that Requires Major Lifestyle Changes. *Pharm Res.* 2008; 25(9): 2097–2116. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2515569/>
 30. Department of Health (2011). Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers. <https://www.gov.uk/government/publications/start-active-stay-active-a-report-on-physical-activity-from-the-four-home-countries-chief-medical-officers>
 31. Yusuf S et al. Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study. *Lancet.* 2004 Sep 11-17;364(9438):937-52. <https://www.ncbi.nlm.nih.gov/pubmed/15364185>

-
32. House of Commons Health and Social Care Committee Childhood Obesity Inquiry 2018 Submission from the MRC Epidemiology Unit and the Centre for Diet and Activity Research (CEDAR). <https://www.cedar.iph.cam.ac.uk/resources/evidence-submissions/>
 33. Public Health England (2018). Density of fast food outlets in England - Metadata and summary local authority data. <https://www.gov.uk/government/publications/fast-food-outlets-density-by-local-authority-in-england>

Draft