

Taking Local Action to Address Excess Weight in Bedford Borough

Director of Public Health Report 2022



Contents

Introduction from Vicky Head	3
Chapter 1: The scale of the problem	4
Excess weight is very common in Bedford Borough	4
Excess weight is an important driver of inequalities in health	6
Chapter 2: The problem of scale - supporting individuals to lose weight	7
Local weight management services are not used as much as they could be	7
Weight management services help individuals improve their health but will not solve the problem	7
Chapter 3: We can create a healthier food environment	10
Our environment makes it difficult to make healthy choices	10
The cost of living and COVID-19 pandemic have impacted access to healthy food	11
Chapter 4: We can build active places and neighbourhoods	13
Active travel increases regular activity	13
Green spaces bring physical and mental health benefits	15
Chapter 5: Taking local action together	16
Ambitions for change	17
Appendix A: Local weight management services	19
Appendix B: References	20



Introduction from Vicky Head

Three out of five adults and two in five 11-year olds living in Bedford Borough are overweight or obese. Excess weight is a major cause of ill health and death locally and disproportionately affects some of our poorest communities.

- Excess weight increases the risk of developing chronic diseases including cardiovascular disease, type 2 diabetes, cancer and osteoarthritis. It increases an individuals' risk of hospitalisation and is associated with mental health problems such as anxiety and depression¹.
- Excess body fat is a factor in nearly a quarter of deaths among people aged over 45 and now contributes to more deaths in this age group than smoking. Moderate obesity reduces life expectancy by about 3 years and severe obesity can shorten a person's life by 10 years. This 10 year loss is equal to the effects of lifelong smoking².
- Obesity was a factor in nearly 4,800 hospital admissions in Bedford Borough in 2019/20³. Obesity-related admissions in the most deprived areas of England are 2.4 times greater than in the least deprived areas⁴.
- The NHS spends around £6.5 billion a year (close to 4% of its 2022/23 budget) on treating the consequences of obesity. This is forecast to rise to £9.7 billion by 2050. The annual cost to society, including wider economic costs, is around £54 billion, roughly equal to 1-2% of GDP or the total annual funding allocated to schools in England⁵.
- Excess weight carries significant economic costs for Bedford Borough, including lost working days and economic inactivity, increased benefits payments and costs associated with NHS treatment and care⁶.

Tackling excess weight is not simply a matter of educating individuals to make healthier choices. The people who are most likely to become overweight or obese are those whose lives are shaped by work, school and social environments that promote overeating and inactivity. It is easy to feel overwhelmed by the scale and complexity of the challenge, but there are effective actions we can take locally. My report this year focuses on the important roles that partner organisations and businesses in Bedford Borough play in shaping our environment and keeping our population healthy.

If we are serious about working preventatively to improve health in Bedford Borough, there is more we can do together to stop people developing excess weight and support more people to lose weight.

Vicky Head
Director of Public Health



Chapter 1: The scale of the problem

Obesity is a complex chronic health condition with multiple factors impacting its development including genetics, psychological, environmental and societal factors. Despite this, it is a commonly held belief that weight loss is solely an individual's responsibility. This can lead to weight stigma, the negative stereotyping of people based on body weight, which can cause considerable harm.

Excess weight is very common in Bedford Borough

In Bedford Borough over 90,000 people aged over 18 are overweight or living with obesity. This equates to three in five adults (63%), which is comparable to the England average of 64%.

21% of children aged 4-5 years old are overweight or obese which is similar to the England average of 22% for this age group. By the time children in Bedford Borough reach 10-11 years old, this figure increases to 39%, which is also similar to the England figure of 38%.

The proportion of 4-5 year olds who are overweight or obese has remained stable since the National Child Measurement Programme began in 2006. The proportion of 10-11 year olds who are overweight or obese has risen from 30% in 2006/07 to 39% in 2021/22, with the biggest increase recorded over the last two years.

Figure 1: Prevalence of excess weight in Bedford Borough

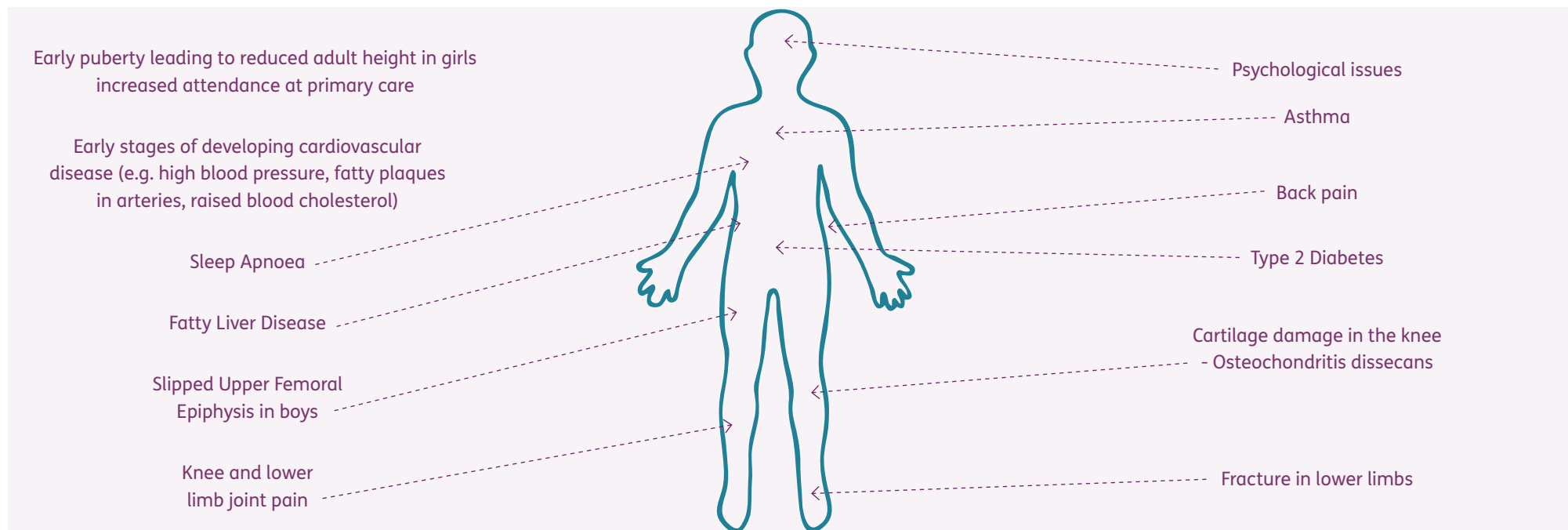


Source: Health Survey for England 2019 and National Child Measurement Programme 2021/22

Levels of excess weight for both adults and children are increasing over time⁷ and younger people are becoming obese at earlier ages and remaining obese in adulthood. Being overweight or obese in childhood has profound impacts on health and affects the quality of our children's lives, their education and their life chances. Children who are obese or overweight are more likely to experience physical health issues⁸, including

Type 2 diabetes, asthma, musculoskeletal pain and mental health problems, such as depression (Figure 2). If children born in 2022 continue eating current diets, the projected health implications of obesity as they age are stark. By the age of 65 years 75% of those children will be overweight or obese, 1 in 3 will have diabetes and 1 in 5 will have cardiovascular disease⁹.

Figure 2: Health impacts of childhood obesity



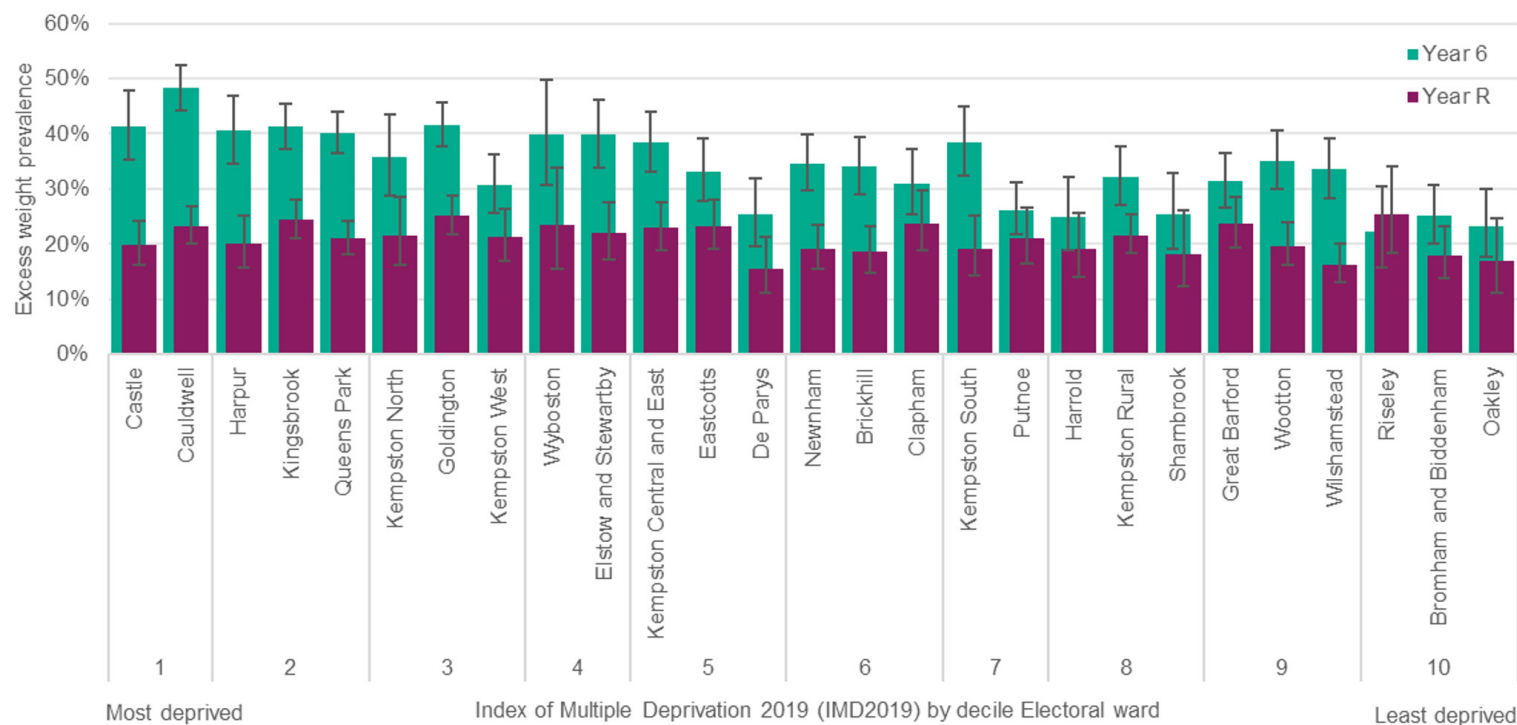
Source: Time to Solve Childhood Obesity. An Independent Report by the Chief Medical Officer, 2019

Excess weight is an important driver of inequalities in health

Excess weight can affect anyone, but it more commonly affects people living in areas of deprivation, on low incomes, those living with disabilities and some black and minority ethnic groups¹⁰. These differences in excess weight translate to worse health outcomes for people as well as contributing to health inequalities. This pattern is apparent across areas of highest deprivation in Bedford Borough, where the latest data shows that almost a quarter of children (23%) residing in the 10% most deprived wards

are living with excess weight when they begin school (aged 4-5 years old) and this figure increases to 45% by the time they are 10-11 years old¹¹. In Cauldwell, one of the most deprived wards in Bedford Borough, children are more than twice as likely to be living with excess weight (48%) than children living in Oakley (23%), one of the most affluent wards (Figure 3). This inequalities gap is increasing over time.

Figure 3: Excess weight prevalence of primary school children by ward and deprivation decile in Bedford Borough (2016-19 & 2021-22)¹¹



Source: National Childhood Measurement Programme 2016-19 & 2021-22

Note: 2019-20 years are not included due to incomplete/missing data during the Covid-19 pandemic

Chapter 2: The problem of scale: supporting individuals to lose weight

Free weight management programmes are available locally to support people living with excess weight. Evidence suggests they are effective for short-term weight loss and programmes can be targeted so that they help address health inequalities. Weight loss tends to be modest but even small weight reductions bring health benefits. These programmes are an important intervention to enable individuals to improve their health, but on their own they will not solve the obesity problem at a population level.

Local weight management services are not used as much as they could be

The full range of free local weight management services is listed in Appendix A. The three interventions available through the NHS or commissioned by the local authority are MoreLife, the NHS Digital Weight Loss Programme and the NHS Diabetes Prevention Programme.

MoreLife provide weight management services for children and young people, adults, and pregnant or recently pregnant women in Bedford Borough, Central Bedfordshire and Milton Keynes. In 2021/22, 3,653 residents were referred (including self-referrals) to the MoreLife programme across the three local authorities and 855 people completed the programme. In terms of capacity, this service had an additional 1,300 spaces that were unused. The online component of MoreLife has unlimited capacity.

The **NHS Digital Weight Loss Programme** is available on referral for people with high BMI and diabetes or hypertension. Just 65 people were referred to the NHS Digital Weight Loss programme across BLMK (Bedford Borough, Central Bedfordshire, Luton and Milton Keynes) between April and July 2022. Based on this an estimated 260 people will be referred over the course of the year, which is just over 10% of the referral target for this service. Again, as an online service, in practice this service has unlimited capacity.

The **NHS Diabetes Prevention Programme** is available on referral for people at high risk of developing diabetes. The programme has capacity to support over 13,000 people across BLMK a year. Based on current activity it is estimated that around 9,600 residents will be referred, leaving 3,700 places unused.

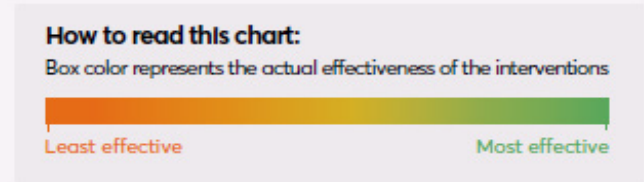
More people could be supported to lose weight through these services and making the most of the available support is an important challenge. More can be done to raise awareness of MoreLife so that residents can self-refer, but referral by clinicians to all three services is critical. It can be difficult to raise the subject of weight, but training can help frontline professionals feel confident to offer brief advice, including where to get support.

Weight management services help individuals improve their health but will not solve the problem

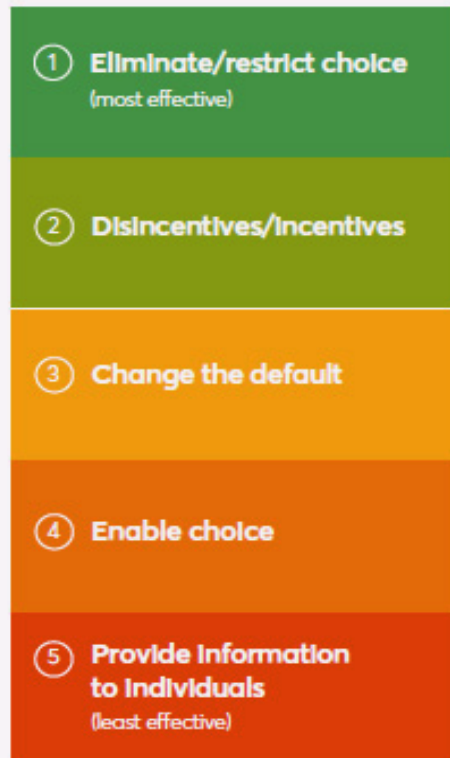
While together these services could be supporting around 20,000 people from Bedford Borough, Central Bedfordshire and Milton Keynes to lose weight every year, we know that over 90,000 adults in Bedford Borough alone are living with excess weight. The scale of the obesity challenge means the impact of individual weight management services is limited. To have a greater impact at a population level, the most effective interventions are those which restrict less healthy food choices or provide incentives for healthy eating, such as through limits on portion sizes, reformulation of foods, restrictions on advertising or taxation. As well as promoting weight loss, these interventions are critical for preventing people – especially children – from gaining weight in the first place.

Research suggests there is a mismatch between what people think the most effective ways of addressing excess weight are, and what the evidence-base suggests is most effective (Figure 4). To have the biggest impact on excess weight, we need to shift the focus away from providing health education to individuals and focus instead on interventions that change people's default behaviours, incentivise healthier choices and restrict or eliminate unhealthy choices.

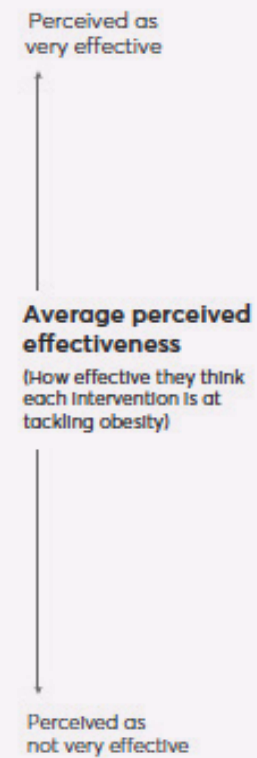
Figure 4: Perceived and actual effectiveness of obesity interventions



How effective the interventions are
 (by intervention type)*



How effective they are perceived to be
 (by intervention)



*These categories and associated rankings are based upon the Nuffield Intervention Ladder. Source: Nuffield Council on Bioethics. Public health ethical issues. London, Nuffield Council on Bioethics, 2007.

Source: Changing Minds about Changing Behaviours: Obesity in focus; NESTA (2021)¹²



Making progress locally:

MoreLife Weight Management Service

- Free adult and child weight management services for eligible Bedford Borough residents to support weight loss either face to face or remotely.
- Support for women during pregnancy.
- Sessions run in a fun and friendly environment and cover a range of subjects including healthy eating, physical activity and body image to help support sustainable, long term weight loss.

Over 700 Bedford Borough residents have been supported through the MoreLife programme since 2019, however we need more people to take advantage of the support available. This is particularly true for people who may be at higher risk of poorer health outcomes, for example, people with a learning disability or severe mental illness, those living in areas of higher deprivation and people from minority ethnic groups. It can be difficult to raise the issue in a way that doesn't stigmatise excess weight but training is available to support staff to do this in a sensitive manner.



Case Study

MoreLife Weight Loss Programme

Jane's weight impacted her quality of life, family life and mental health. She struggled to find her confidence in her day-to-day life and felt anxious about her health and the way she looked.

'I am so pleased to say I have lost weight. I made small changes from all the information and tips I have been given on the programme.'

I feel so much better... I feel so much more in control of my body. I realise that if I have a bad day then it doesn't matter because tomorrow is a new day for me, so I can try again.'

Chapter 3: We can create a healthier food environment

Many of the factors driving unhealthy weight gain are linked to the environment we live in. A variety of socio-economic factors – including income, housing, education, sale of unhealthy foods, exposure to advertising impact whether we can eat healthily and determine our risk of developing excess weight. Differences in the availability of affordable, healthy foods for example play a key role in driving health inequalities between people living in advantaged and disadvantaged circumstances.

Our environment makes it difficult to make healthy choices

Our food environment is defined by the physical, economic, political and cultural factors that influence our food choices on a daily basis. Healthy food and drink choices are often not affordable, convenient, or accessible to everyone (Figure 5). Fast and processed food companies influence food choices by monopolising advertising space, using their financial power to offer appealing food promotions, including buy one, get one free offers on high calorie and processed foods. Unhealthy options often dominate the checkouts, while shops, workplaces, restaurants and takeaways can tempt us with large portion sizes, far exceeding daily recommendations. The density of fast-food outlets has increased nationally, particularly in areas of high deprivation. In 2017 there were 94 fast food outlets per 100,000 people in Bedford Borough, which ranks as 128 out of 325 local authorities (where 1 has the highest density). Castle and Harpur wards had the most fast food outlets, and together they accounted for nearly half of all the fast food takeaways in the borough (70 out of 150 outlets)¹³.

Advertising and sponsorship are used to place brands centre stage and help them shine brightly in the minds of young people, often using cartoon characters or famous people to make unhealthy food appear attractive

and part of everyday life. The UK Government has set out plans to regulate some of these practices, like restricting unhealthy food advertising online and on TV. Whilst there is a need for national regulation, there are also opportunities to intervene locally and many areas are now developing policies to restrict unhealthy advertising in these spaces and on their public transport networks.

Nationally more than one quarter (27.1%) of adults and one fifth of children eat food from out-of-home food outlets at least once a week. These meals tend to be associated with higher energy intake, higher levels of fat, saturated fats, sugar, and salt, and lower levels of micronutrients¹⁴. Across Bedford Borough, just 51% of adults meet the recommended ‘5-a-day’ on a ‘usual day’ which is slightly lower than the national figure of 55%.

The Council, NHS and other public sector organisations procure food services and lease premises that sell food. They could use of their buying power more effectively to encourage the production and supply of healthy food options. There can be a disconnect between the verbal message given to people, for example in a diabetes clinic, and the visual message when they then walk into a hospital shop that offers a range of sugary drinks and treats. Several NHS Trusts have set standards for the balance and types of food on sale in food shops on their premises.



The cost of living and COVID-19 pandemic have impacted access to healthy food

The social and economic impacts of the pandemic and current financial crisis have been widespread. During the height of the COVID-19 pandemic many people faced challenges in accessing and maintaining a healthy diet and exercising. The pandemic influenced how people use their local environments and access food. More people are now working from home, and early evidence suggests that the pandemic has modified eating behaviours, with increased snack frequency and a preference for sweets and ultra-processed food rather than fruits, vegetables, and fresh food¹⁵.

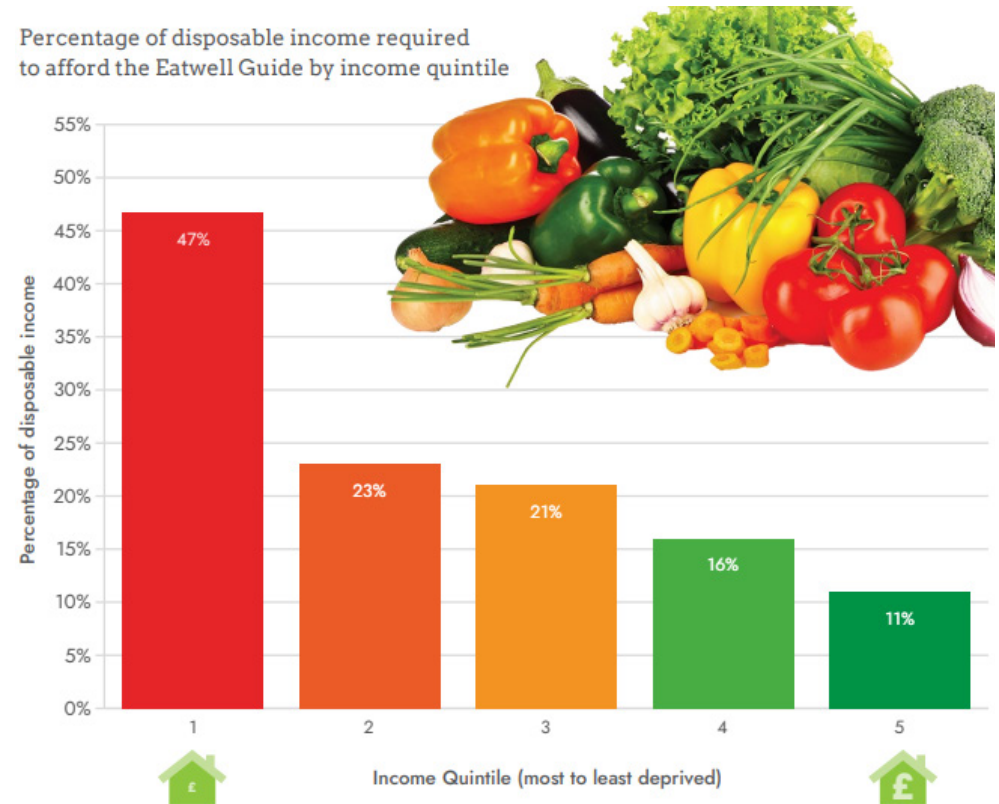
Affordability influences access to healthy foods and, for families on a lower income, a healthy diet may be unaffordable¹⁶. The poorest fifth of UK households would need to spend an estimated 47% of their disposable income on food to meet the cost of the Government's recommended healthy diet. This compares to just 11% for the richest fifth (Figure 5).

Those on lower incomes are more likely to be price-sensitive when shopping and therefore more influenced by their local food offer.

Along with the economic impact of the COVID-19 pandemic¹⁷, the current cost of living crisis risks many being unable to afford essentials to maintain their health. This may cause increased stress and anxiety as families try to make ends meet. A recent ONS report highlighted that 15% of adults were worried their food would run out before they had money to buy more, and the proportion was higher among those with dependent children (25%), those who were Asian (or Asian British) (26%), "Other ethnic group" (46%) or living in the most deprived areas in England (29%)¹⁸.

Local foodbanks are seeing a dramatic increase in demand¹⁹. The Food Bank in Bedford Borough is one of the local organisations providing food parcels to local residents and demand has increased four-fold over the last two years. In Feb 2020 (pre-pandemic) the Food Bank supported just over 500 residents and by September 2022 almost 2,000 people were supported during that month alone.

Figure 5: Affordability of a healthy diet



Source: Food Foundation¹⁶



Making progress locally:

Supporting vulnerable families: Holiday Activity and Food (HAF) Programmes

These programmes launched in 2021 and provide activities for children who qualify for free school meals in the school holidays. Children receive at least one hot meal a day that meets the requirements of the School Food Standards.

Over 12 months, the programme has seen over 3,500 attendances across Bedford Borough.

Healthy Start Scheme: a healthy start to life

The Healthy Start Scheme is a national, means-tested scheme providing a pre-paid card to buy fruit and vegetables, vitamins and milk for low-income pregnant women, families with pre-school children and mothers under 18 years of age.

1,409 families in Bedford Borough were eligible to access the scheme²⁰ at the start of the pandemic. This figure increased by almost 20% the following year.

Current uptake of the scheme is 68%, which is similar to uptake nationally but could be higher. The Public Health team is working with partners to increase local uptake.

Chapter 4: We can build active places and neighbourhoods

Neighbourhoods are places where people live, work, and play and have a sense of belonging. Research shows that the environment in which we live is linked to our health throughout our lives. For example, the design of neighbourhoods can influence how much physical activity we do, how we travel and move, how we socialise and make local connections, and our mental and physical health and wellbeing.

The Bedford Borough Local Plan 2030²¹, sets out the location and scale of future development of Bedford Borough. The plan includes Policy 2S, which requires the preparation of Health Impact Assessments where proposals are likely to have a significant impact on the health and wellbeing of the local population or particular groups. Health Impact Assessments are intended to add value and assist decision making through the planning process. They allow any necessary mitigation measures to be identified and can assess the cumulative impacts of a proposal on health infrastructure and the demand for health services.

Efforts to improve health outcomes through the planning process are also applied by taking account of access to services and facilities by walking and cycling, and by providing access to formal and informal community meeting spaces and sports facilities. The links between health, education, community and planning are highlighted in national planning policy which acknowledges the role that the planning system can play in improving health outcomes.

Active travel increases regular activity

As a society we move less than we used to. Access to safe and attractive routes for walking and cycling is important in giving people the opportunity to be active regularly, which is necessary for good physical and mental health.

Walking, cycling, and scooting to school has been actively encouraged in Bedford Borough since 2014. The Hands Up Survey in 2020/21 highlighted that 50.5% of children in Bedford Borough travel to school actively. In comparison nationally just 47% of children and 44% in the East of England travel to school actively²².

Bedford Borough Council's emerging Local Transport Plan will also be supported by the recently submitted Local Plan 2040.





Making progress locally:

Cycle Network Signage

- Directional signage across 75km of Green Wheel and Bedford Borough Cycle Network was provided to better highlight and publicise cycle routes in the borough.
- Four plinths were installed in the town centre to help cyclists navigate their way around the urban area.

Pre-School Children Learn to Ride

In 2022, over 360 children from primary schools across Bedford Borough took part in learn-to-ride sessions.

Parent feedback to the team:

'I wanted to say a big thank you for the session we attended...every previous attempt to get my child cycling without stabilizers had ended in tears and frustration.

The methods you taught were so simple and effective and she was off riding on her own after just 25 minutes.'

School Streets

Bedford has three School Streets, which are areas outside schools with temporary restrictions on motorised traffic at pick-up and drop-off times. The roads are open to walking, cycling and scooting.

In May 2021 the first School Street was piloted on Edward Road in consultation with Cauldwell School, Peter Pan Nursery School and the local residents. After two weeks 88% of those surveyed told us they wanted to make the School Street permanent.

The School Street encouraged a modal shift from car use, with 21% of pupils from Cauldwell School traveling by car before the implementation of the School Street which reduced to 14% six months later. In addition, a new crossing has been installed to help pupils living in a new development cross the busy road to school and nursery.

'So good not having cars racing up and down the road at key times. Good to see greater footfall on the paths.'

Local resident

Green Spaces bring physical and mental health benefits

Green spaces are valued for their physical and mental health benefits and for the part they play in creating successful, balanced, and sustainable communities. Bedford Borough boasts a variety of local green spaces for residents and visitors that range from planned and manicured formal Victorian parks and embankments, to more informal country parks and nature reserves. Five of the Borough's nine major parks have been awarded a Green Flag Award, which recognises and rewards well-managed parks and green spaces across the UK. From surveys undertaken in our Green Flag parks 80 to 96% of users feel



these parks improve their quality of life, whilst 89 to 96% of users feel they have a positive impact on the local community, highlighting the clear importance to the people who use them. They provide facilities and space for physical activities

including sports courts and pitches, running and walking routes, allotments, playgrounds and gym equipment, whilst supporting mental health as high quality, green and natural spaces. Our parks volunteering team help us to make the most of our parks and open spaces, helping social cohesion and tackling issues such as loneliness by bringing people together in places that they love.

National surveys found that engagement with green space was more important to people during the pandemic, but access was not uniform across all communities. People living in areas of deprivation or from Black and minority ethnic groups generally reported less access to adequate green space, including private gardens and public spaces. The green spaces accessed tended to be of lower quality, smaller size, and further from their homes compared to White British residents. This is referred to as “green deprivation” and the communities that experience it are more likely to have to travel longer distances for safe access to good quality green space.²³

Making progress locally:

Green Social Prescribing and Conservation Projects

The Bedfordshire Rural Communities Charity (BRCC) develops green social prescription activities across Bedfordshire, including developing the Green Wellbeing Directory to get residents be physically active outdoors, and benefit from spending time in nature²⁴. This year the team recruited a Green Social Prescribing Officer and a Community Garden Support Officer to share the work across communities.

Allotment Scheme

Bedford Borough Council directly manages three allotment sites that comprise a total of 320 plots across the three sites. The demand for allotments space increased during the pandemic and there is a current waiting list of almost 200 residents.

Junior Park Run

- Began in January 2017 and is an official Junior Park Run.
- The event is run by volunteers every Sunday morning in Jubilee Park and attracts around 40 - 50 children & their families on a weekly basis.
- The run takes place in two of the most deprived wards in Bedford Borough, Kingsbrook and Cauldwell.

Mindful Walking

Since 2017 the Sports Development team has provided a Mindful Sport Programme which offers a series of weekly session tailored towards better Mental Health Outcomes.

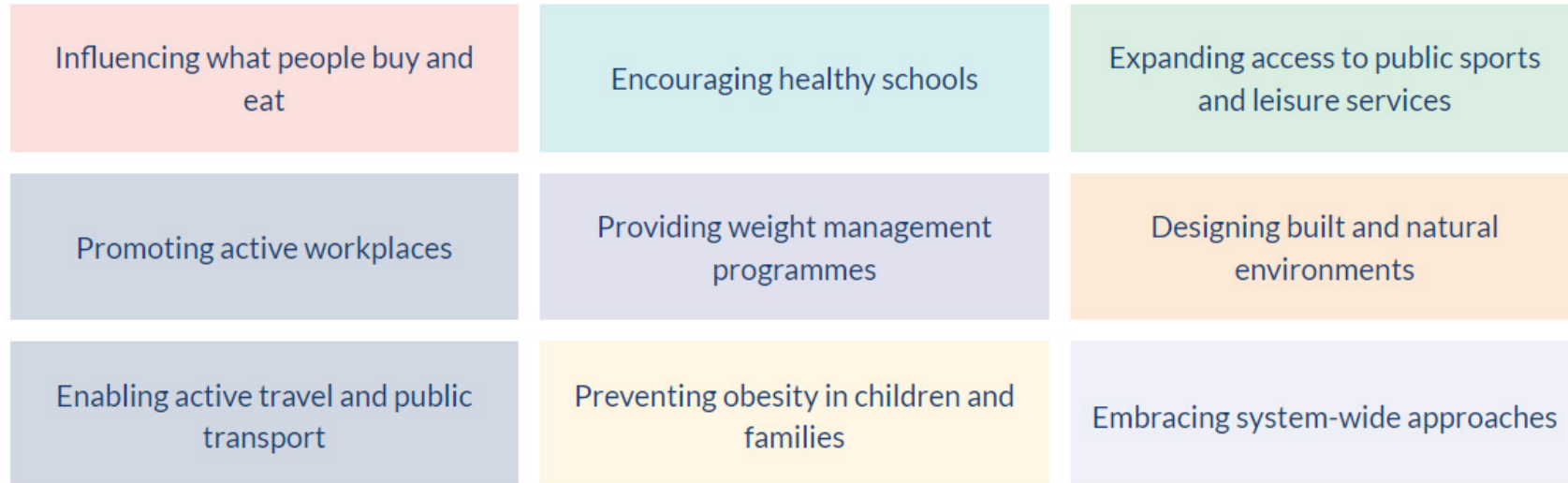
- The Mindful Walk is a free 30min – 1 hour guided group with different weekly routes around Bedford, and includes the beautiful Victorian riverside embankment and the local public parks (Russell Park and Bedford Park).
- The Walk begins at The Higgins Museum in Bedford town centre and includes a stop at a coffee shop allowing for social peer to peer support along the route
- The Walk takes place every Friday and a team of regular volunteers have welcomed over 250 attendees over the last 10 months.
- The session offers a safe space for local people to enjoy the outdoors and meet new people whilst doing so.
- The Higgins Museum hosts a popular table tennis session with indoor and outdoor tables as part of the Council's Mindful Sport programme.

Chapter 5: Taking local action together

Multiple factors contribute to excess weight and its consequences for the health and wellbeing of our residents. A growing body of evidence suggests that excess weight cannot be tackled by a single agency. Alongside national interventions by Government, it requires a collaborative approach across organisational boundaries, making it everybody's business.

Together, partner organisations and businesses in Bedford Borough play important roles in shaping our environment and keeping our population healthy. There is more we can do to prevent people developing excess weight and to support more people to lose weight. The ambitions below set out actions that the Council and partner organisations can take together to address the excess weight crisis and send a clear message to members, residents and service providers that this is a priority.

Figure 6: Actions to tackle excess weight



Ambitions for change

Ambition 1

Work together to create healthy, active places to learn, work and play

1. Employers and service providers, including the Council and the NHS, should make it easy to access healthy food, through the food services they procure and the businesses that sell food and drink on their premises.

2. Organisations, including the Council, should explore opportunities to limit the marketing, placement, advertising and sponsorship of unhealthy foods.

3. The Council should continue through its planning and transport responsibilities, to make it easier and safer for residents to walk, cycle and use public transport where it is appropriate to do so, and support greater access to green spaces.

4. Employers should explore options to build movement into the working day and make active forms of travel easier, attractive and more affordable.

5. System partners should ensure there is support for voluntary and community organisations to increase access to healthy food and physical activity, with a focus on families most affected by increases in the cost of living.

Ambition 2

Work together to support more people to lose weight and keep it off

- 1. The Council and the NHS should work together to make it easy to access all publicly funded weight management services.**
- 2. The NHS should work to increase the number of patients successfully referred to the full range of locally available weight management services.**
- 3. Health and care services should work to increase the confidence of frontline professionals to raise the subject of excess weight and offer brief advice, including where to get support.**
- 4. Employers, as part of their approach to workplace wellbeing, should promote the availability of local weight management services.**
- 5. Throughout these actions extra effort should be made to improve access to weight management services for those at higher risk of excess weight, including people with learning disabilities, people with severe mental illness, those living in areas of higher deprivation and people from minority ethnic groups.**

Appendix A: Local weight management services

Intervention	Area service is available	Brief Summary
NHS Diabetes Prevention Programme	BLMK	9-12 months behavioural change programme to prevent diabetes in adults at high risk. Group-based but one-to-one digital coaching also available. Click here for more information
MoreLife (Tier 2 weight management service)	Bedford Borough, Central Bedfordshire and Milton Keynes	Locally commissioned 12-week group behavioural and lifestyle interventions to reduce BMI. Programmes available for adults, pregnant women and families. Click here for more information
NHS Digital Weight Management Service	BLMK	Nationally available 12-week digital behavioural and lifestyle intervention to reduce BMI for adults with obesity who also have diabetes and/or hypertension. Click here for more information
Specialist obesity services (also known as Tier 3 and 4 services)	BLMK	Multidisciplinary services involving behavioural, medical and psychological services. Route to bariatric surgery if clinically indicated. Click here for more information
NHS Low Calorie Diet Programme pilot	BLMK	12-month programme with 3 months of total diet replacement followed by further 9 months of behavioural support for adults who are living with type 2 diabetes and are also overweight. Click here for more information

Appendix B: References

1. Public Health England. [online]. Guidance: Health matters: obesity and the food environment. 2017. Available from: [Health matters: obesity and the food environment - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/health-matters-obesity-and-the-food-environment)
2. Prospective Studies Collaboration. Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies. *Lancet*. 2009; 373 (9669); 1083-1096. Available from: [https://doi.org/10.1016/S0140-6736\(09\)60318-4](https://doi.org/10.1016/S0140-6736(09)60318-4)
3. NHS Digital. Statistics on Obesity, Physical Activity and Diet 2021: Data tables. 2021. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-obesity-physical-activity-and-diet/england-2021/data-tables>
4. Kings Fund. Tackling obesity: the role of the NHS in a whole-system approach. 2021. Available from: <https://www.kingsfund.org.uk/publications/tackling-obesity-nhs>
5. NESTA. The economics of obesity. [online]. Dec 2022. Available from: <https://www.nesta.org.uk/blog/the-economics-of-obesity/>
6. Public Health England, 2015. Making the case for tackling obesity – why invest? [online]. 2015. Available from: [Factsheet \(khub.net\)](https://www.khub.net/factsheet/making-the-case-for-tackling-obesity-why-invest)
7. House of Commons Library. Obesity statistics. [online]. 2022. Available from: <https://researchbriefings.files.parliament.uk/documents/SN03336/SN03336.pdf>
8. Department of Health & Social Care, HM Government. 2018. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718903/childhood-obesity-a-plan-for-action-chapter-2.pdf
9. The Food Foundation. The Broken Plate [online]. 2022. Available from: [Home \(foodfoundation.org.uk\)](https://www.foodfoundation.org.uk/)
10. Office for Health Improvement & Disparities. Adult obesity: Applying All Our Health. 2022. Available from: <https://www.gov.uk/government/publications/adult-obesity-applying-all-our-health/adult-obesity-applying-all-our-health>
11. NHS Digital. National Child Measurement Programme 2021/2022 School Year.
12. NESTA. Changing Minds about Changing Behaviours: Obesity in focus [online]. 2021. Available from: [Changing Minds about Changing Behaviours: Obesity in focus | Nesta](https://www.nesta.org.uk/publications/changing-minds-about-changing-behaviours-obesity-in-focus)

13. Public Health England. Research & Analysis: Fast food outlets: density by local authority in England. 2018. Available from: <https://www.gov.uk/government/publications/fast-food-outlets-density-by-local-authority-in-england>
14. Public Health England. Guidance: Health matters: obesity and the food environment. 2017. Available from: <https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2>
15. Gonzale-Monroy, C. et al. Eating Behaviour Changes during the COVID-19 Pandemic: A Systematic Review of Longitudinal Studies. Int J Environ Res Public Health. 2021.18(21):11130. Available from: <https://doi.org/10.3390/ijerph182111130>
16. The Food Foundation. The Broken Plate. [online]. 2019. Available from: <https://foodfoundation.org.uk/publication/broken-plate-2019>
17. Williamson, S et al. Deprivation and healthy food access, cost and availability: a cross-sectional study. Journal of Human Nutrition and Dietetics. 2017. 30 (6);791-799. Available from: <https://doi.org/10.1111/jhn.12489>
18. Office for National Statistics. The impact of winter pressures on different population groups in Great Britain: 22 November to 18 December 2022. 2022. Available from: [The impact of winter pressures on different population groups in Great Britain - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/publications/articles/the-impact-of-winter-pressure-on-different-population-groups-in-great-britain-22-november-to-18-december-2022)
19. Joseph Rowntree Foundation. Going under & without: JRF's cost of living tracker, winter 2022/23 [online]. 2022. Available from: [Going under and without: JRF's cost of living tracker, winter 2022/23 | JRF](https://www.jrf.org.uk/news/going-under-and-without-jrf-s-cost-of-living-tracker-winter-2022-23)
20. Data provided by the National Healthy Start team, Feb 2020
21. Bedford Borough Council. Bedford Borough Local Plan 2030. 2020. Available from: [Local Plan 2030 - Overview | Bedford Borough Council](https://www.bedford.gov.uk/bedford-borough-local-plan-2030)
22. Department for Transport. The National Travel Survey: 2021. 2022. Available from [National Travel Survey: 2021 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/national-travel-survey-2021)
23. New Economics Foundation. Escaping green deprivation. [online] 2021. Available from: <https://neweconomics.org/2021/01/escaping-green-deprivation>
24. Bedfordshire Rural Communities Charity. Green Wellbeing Directory. Available from: <https://yourwellbeingbedfordshire.org.uk/green-wellbeing/green-wellbeing-directory>

Finding out more

If you would like further copies, a large-print copy or information about us and our services, please contact us at our address below.

Për Informacion معلومات کے لئی برای اطلاع Za Informacije
ਜਾਣਕਾਰੀ ਲਈ Informacija Per Informazione তথ্যের জন্য للمعلومات



Public Health

Bedford Borough Council
Borough Hall
Cauldwell Street
Bedford
MK42 9AP



public.health@bedford.gov.uk



www.bedford.gov.uk