

HEALTHY WEIGHT IN LEICESTER ADULTS: JOINT STRATEGIC NEEDS ASSESSMENT

A Joint Strategic Needs Assessment (JSNA) is a statutory process by which local authorities and commissioning groups assess the current and future health, care and wellbeing needs of the local community to inform decision making.

The JSNA:

Is concerned with wider social factors that have an impact on people's health and wellbeing such as poverty and employment.

Looks at the health of the population with a focus on behaviours which affect health, such as smoking, diet and exercise.

Provides a view of health and care needs in the local community

Identifies health inequalities

Indicates current service provision

Identifies gaps in health and care services, documenting unmet needs

Healthy Weight

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1.0 INTRODUCTION

A healthy weight is a large contributor to overall health and quality of life. The effects of adverse body weight (underweight and excess weight) extend beyond physical health and can also have a bearing on mental wellbeing. Adverse body weight may influence an individual's productivity and ability to undertake everyday tasks.

1.1 WEIGHT CLASSIFICATION

There are different measures for weight classification. The National Institute for Health and Clinical Excellence (NICE, 2006) uses height and weight to calculate a Body Mass Index and has recommended the classifications for defining weight in adults, shown in Table 1 below.¹

Table 1: Body Mass Index Classification (BMI) for defining weight in Adults

Classification	BMI (kg/m ²)
Underweight	<18.5
Healthy Weight	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	30.0 – 39.9
Severely Obese	>40

Source: NICE, 2014

Note: The body mass index (BMI) is the mostly widely used method for measuring and classifying the weight of an individual. However, the BMI has inherent weaknesses in distinguishing between muscle or bone mass, and excess fat. However, for most people, BMI is a useful indication of weight status.

1.1.1 HEALTH RISKS OF BEING UNDERWEIGHT

Those with a BMI <18.5 are classified as underweight, which means that an individual's weight is lower than what would be expected for a healthy person of their height. Being underweight carries many health risks including malnutrition and vitamin deficiencies, anaemia, osteoporosis, decreased immune function, fatigue, fertility issues, growth and development issues (in children and teens) and osteoporosis. Causes of being underweight vary and may include financial insecurity, illness, stress, erratic working patterns, poor diet, neglect, and eating disorders.²

It is important to note that when considering issues like eating disorders, many individuals may not present as underweight, and it is widely refuted as an absolute measure for diagnosis of an eating disorder by clinicians.³

1.1.2 HEALTH RISKS OF HAVING EXCESS WEIGHT

Those with a BMI ≥ 25.0 are classified as having excess weight, which means that an individual's weight is heavier than what is expected for a healthy person of their height.

Excess weight carries many health risks and often those with excess weight will have co-morbidities as a complication of their weight. This includes high blood pressure, high cholesterol, and diabetes (or pre-diabetes), gallstones, gastro-oesophageal reflux disease, osteoarthritis, sleep disruption (sleep apnoea), liver and kidney disease and fertility and pregnancy complications.

Having excess weight is the second biggest cause of cancer, with more than 1 in 20 cancer cases attributed to excess weight.⁴ Excess weight also increases your risk of experiencing a stroke; research suggests that each unit increase in BMI (approximately 3.2kg) increases the risk of stroke by 6%.⁵ Adding to this, excess weight can impact on an individual's mental wellbeing and significantly reduce their quality of life.⁶

It is important to note that you can carry excess weight even if you have a nutritious, balanced diet, but are eating or drinking in excess; excess weight does not always suggest a poor diet.

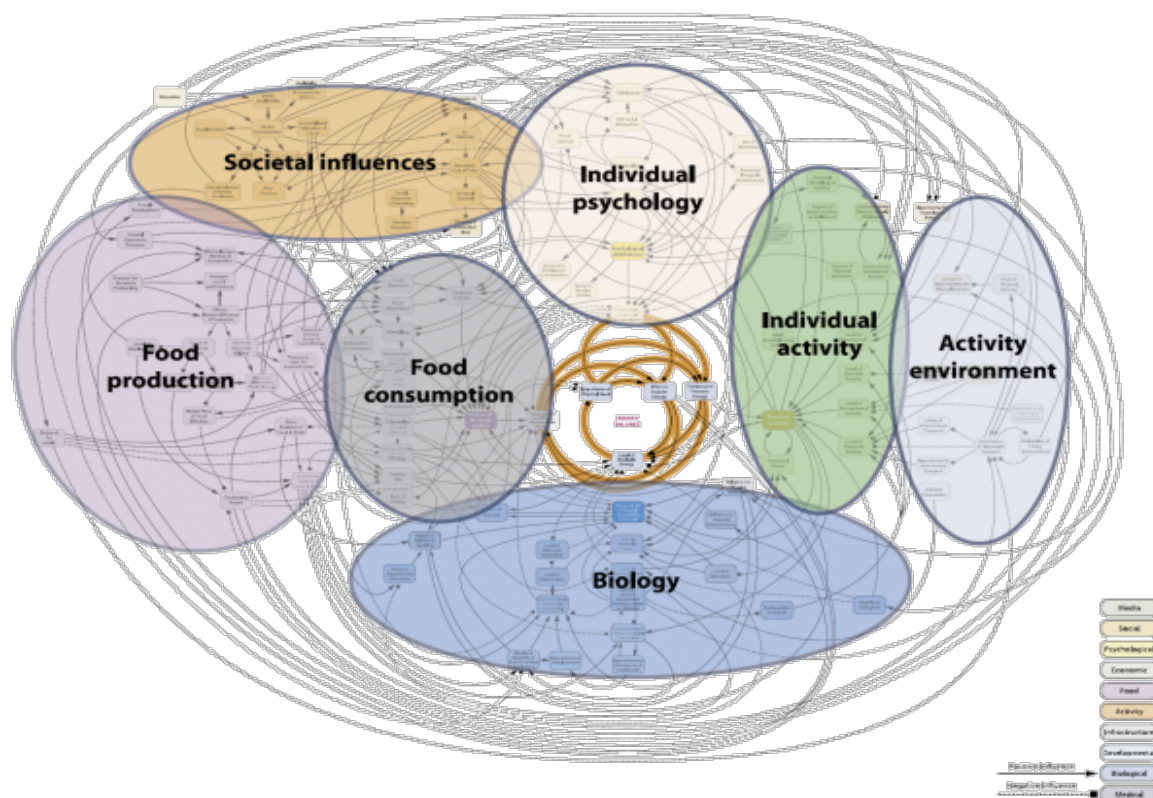
1.2 WIDER DETERMINANTS OF WEIGHT

A person's body weight is subject to a complex interplay of biological, psychological, environmental, and economic factors. These include (but are not limited to):

- universal factors (global food economy, governmental policies, multinational corporations),
- local factors (food economy, health and education systems, socioeconomic status, affordability, access),
- community factors (support systems, built environment, culture, beliefs, social networks),
- individual factors (stress, cooking literacy, mobility, physical activity, mental health, life experiences/trauma)
- intrinsic factors (genes, hormones, psychology).⁷

Considering the breadth and inter-relationship of factors involved, tackling the wider determinants is a significant challenge which requires multi-agency collaboration. The Foresight system map below (Figure 1) shows the complexity of weight status and the number of factors that interact together.

Figure 1. Foresight System Map, 2017



Source: Government Office for Science, Futures, Foresight and Scanning, 2017

1.2.1 BIOLOGICAL INFLUENCES

Our genetic make-up has a large influence on our weight status and there is significant heterogeneity between individuals. The mechanisms behind such differences are not yet entirely clear.

Biological changes continue to occur throughout the life course, and our biology is amenable to lifestyle factors; an unhealthy lifestyle unfavourably impacts how our genes are expressed. This is understood to happen as early as pre-natal whereby children born at low birth weights are more pre-disposed to metabolic disorders and adult obesity. Additional factors like stress and hormones, can also influence weight status. As we age, changes in the way we deposit fat also changes, with individuals storing weight around their organs with increasing age, which can have more serious implications on health⁸.

Ethnicity also has a role in weight status; with body type and composition varying between ethnic groups.⁹ Additionally, health conditions and/or disabilities at birth, or developed later in life, can hinder our ability to maintain a healthy weight. Certain medical conditions for example hypogonadism, hypothalamic influences, polycystic ovarian syndrome, and growth

hormone deficiencies to name a few, can also increase the risk of developing excess weight. Furthermore, medication provided such as steroids, beta blockers and antidepressants can also increase the risk of excess weight.¹⁰

1.2.2 PSYCHOLOGICAL FACTORS

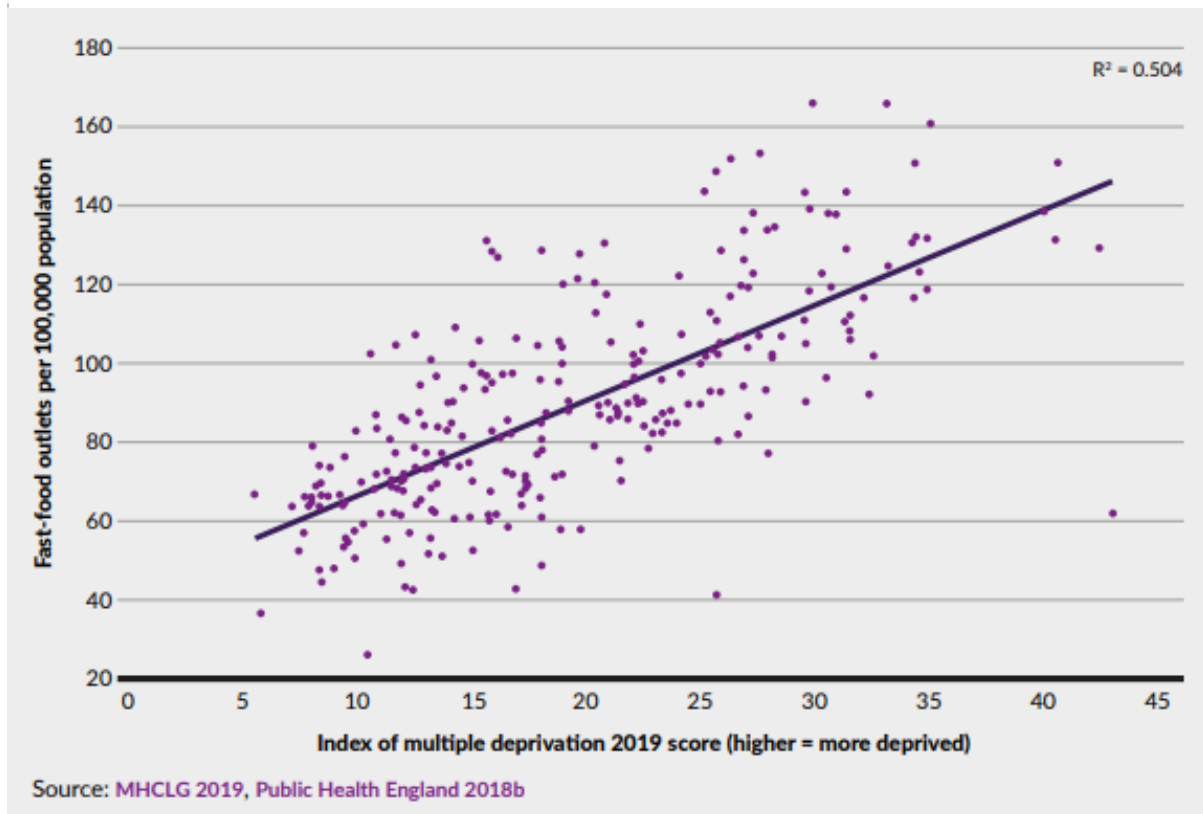
Mental health has a role in weight status. Studies have found a strong relationship between anxiety and depression in underweight and excess weight populations.^{11,12} Individuals may use eating in excess, or restricted eating, as a coping strategy for managing their emotions.^{13,14} Psychological disorders may also be present.¹⁵ Other psychological factors which may subsequently influence weight status include self-esteem, sleep issues, substance misuse, and experience of trauma. These factors may make an individual more inclined to neglect a healthy diet, even if they have the means to.¹⁶

1.2.3 ENVIRONMENTAL FACTORS

The modern-day Western lifestyle does not help support a healthy weight, with many environmental factors, outside of an individual's control, which reduce the ability to make healthy choices. This includes more sedentary jobs and ubiquitous, affordable yet unhealthy food, widescale fast-food marketing, misinformation around healthy eating, more inactive modes of travel, inaccessibility of safe and affordable housing, as well as access to health services and green spaces.¹⁷

The built environment people live in can be one of the greatest challenges to eating healthily. For example, if people are surrounded by foods that are high in sugar, salt or fat, these can become the default choice. Unhealthy food environments are more prevalent in more deprived areas; there is a strong relationship between deprivation and density of fast-food outlets.¹⁸ Not only this, but there are significant existing health inequalities with those from areas of higher deprivation being less likely to eat a healthy diet. In England, for 1 in 5 who are living in poverty, eating healthy food is secondary to eating at all.¹⁹ In 2019, the gap in obesity rates between women from the most and least deprived areas was 17 percentage points, up from 11 percentage points in 2014, while for men the deprivation gap was 8 percentage points, an increase from just 2 points in 2014.²⁰

Figure 2. Fast food outlet density and Index of Multiple Deprivation (IMD)



Source: The Kings Fund, Tackling Obesity: the role of the NHS in a whole-systems approach, 2018

1.2.4 NUTRITION

As a general rule of thumb, the average physically active man needs around 2,500 calories a day, and the average physically active woman needs around 2,000 calories a day, but this will vary depending on body size and composition, physical activity and disease status. Any surplus, even from a healthy diet, can cause weight gain. Diets high in calories, saturated fat, sugar and salt, and limited in micronutrients, as largely seen in the Western diet, are linked with not only excess weight but increased risk of poor health and disease. Public Health continues to advocate for a healthy balanced diet, rich in fruit and vegetables, high in protein, unsaturated fats, and with limited alcohol intake, sugary drinks, snacks, or desserts.

Nutritional status is influenced by many factors including (but not limited to) awareness around food, cooking literacy, household income, working patterns, accessibility and proximity to supermarket stores, cultural differences, and societal influences.²¹

1.2.5 PHYSICAL ACTIVITY

Physical activity increases an individual's total energy expenditure and can support weight maintenance or loss, thereby increasing the likelihood of achieving or maintaining a healthy weight. Physical activity can also improve mental health which may encourage engagement in other positive habits, and continued engagement with exercise, which can support sustainable weight management. Moreover, physical activity can also help improve quality of sleep, reducing tiredness, which can also help curb any unhealthy cravings throughout the day because of fatigue.

However, the notion that physical activity is the only way to maintain a healthy weight can be damaging to many individuals and encourage a poor relationship with exercise; physical activity has merit as part of a healthy lifestyle.

To maximise the number of people who are physically active across the city, Public Health should aim to reduce the barriers to physical activity including accessibility and cost.

1.2.6 BREASTFEEDING

Breastfeeding for 6 or more months appears to have a protective effect against excess weight in later life for the child. Research shows that children breastfed for 6 or more months were 36% less likely to be overweight and 49% less likely to be obese compared to those who were never breastfed.²² In the UK, almost 68% of women in the start breastfeeding, but only 48% continue beyond 6-8 weeks, which is below the recommended 6 months in line with guidance from the World Health Organisation.

1.2.7 IMPACT OF COVID-19

The pandemic brought about direct impacts on health, with individuals unable to exercise as they normally would, with restrictions in place and public spaces closed, and with many individuals falling ill after contracting COVID, and in many cases for protracted periods of time. Being underweight or carrying excess weight was associated with poorer outcomes and greater risk of hospitalisation upon contracting COVID-19.²³

The impact of the pandemic on physical activity levels was more pronounced in disadvantaged groups and areas of high deprivation, those without gardens or smaller housing, or limited access to green space, struggling to exercise like their less deprived counterparts. However, the majority of the population were affected by the impact of the pandemic on exercise; Sport England's Active Lives survey (ALS) covering May 2020-May 2021 during the height of the pandemic and lockdowns, revealed that compared to 12 months earlier there were 700,000 fewer active adults, and 1 million more inactive adults in this timeframe.

It is acknowledged that the COVID-19 pandemic has negatively impacted on some behaviours and provided an opportunity for inequalities to widen. However, it has also provided a shared experience to move forwards along with the opportunity for some to take an interest in, and prioritise health and wellbeing.

1.2.8 SOCIETAL COST

Having a fit and healthy population is essential to reducing pressure on the NHS and supporting the economy. With excess weight estimated to cost the NHS £6 billion annually, a figure which is expected to rise to over £9.7 billion each year by 2050.²⁴

Obesity treatments and technologies which can help people shed 20% of their weight could soon be offered to NHS patients, with a £20 million research boost from central government. The new investment is expected to save the NHS billions over time and ensure that vital funds are repurposed for key frontline services. However, prevention is the best measure against excess weight.²⁵

There is limited data available on the cost of treating underweight patients and it is therefore very difficult to quantify the economic burden of underweight populations.

2.0 WHO'S AT RISK AND WHY?

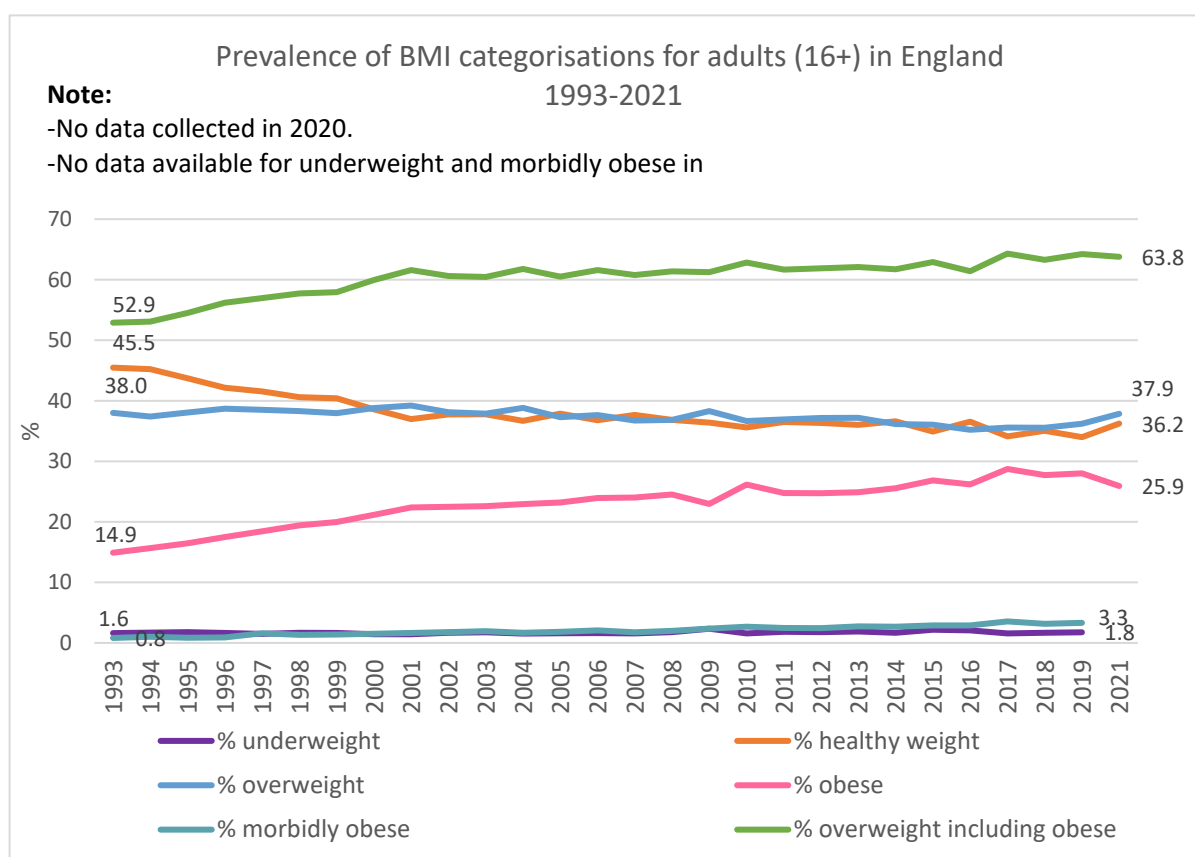
2.1 OVERVIEW

2.1.1 PREVALENCE

Universally, excess weight is more prevalent than underweight and has more than tripled since 1975.

The latest Health Survey for England estimated that around 6 in 10 adults were overweight or obese in England (38% overweight and a further 26% obese or severely obese), making up more than half of the adult population. Figure 3. shows that since 1993, there has been a 20% decrease in adults of a healthy weight. Across other weight categories, there has been a 13% increase in adults who are underweight, a 21% increase in adults who are overweight and obese, and a 99% increase in adults who are obese or severely obese.²⁶

Figure 3. Prevalence of BMI categorisations for adults (16+) in England, 1993-2021



Source: Health Survey for England

2.2 NON-MODIFIABLE RISK FACTORS

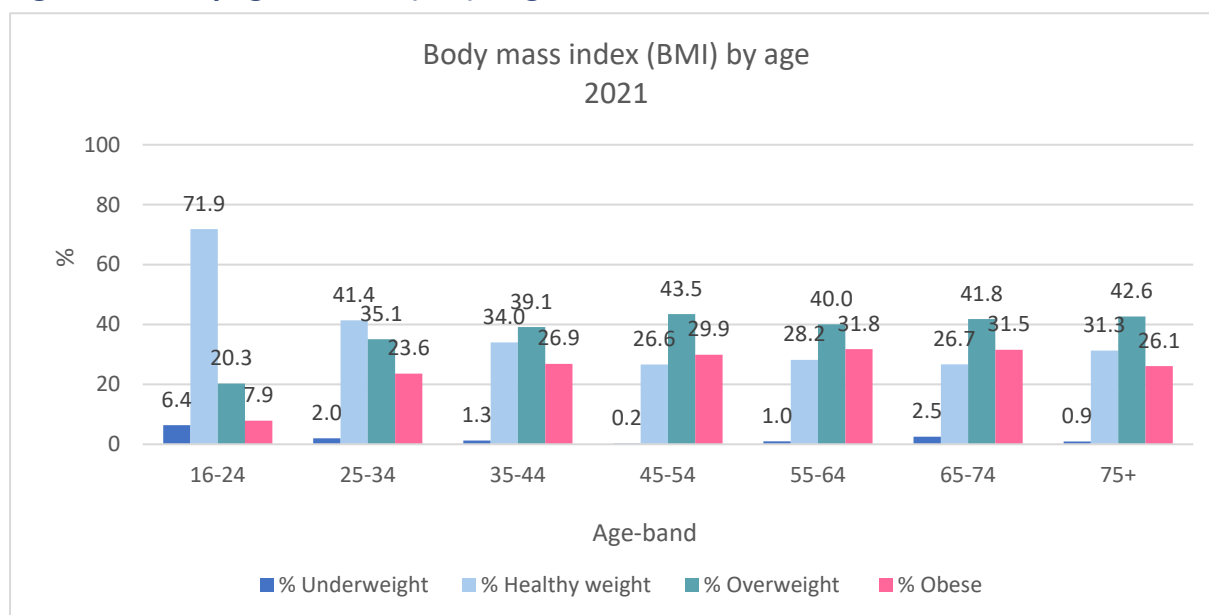
Non-modifiable risk factors encompass a wide range of genetic, physiological, and demographic elements that significantly influence an individual's weight status. While interventions and strategies targeting modifiable risk factors, such as diet and physical activity, are essential in addressing weight management, understanding the role of non-modifiable risk factors is equally important in developing comprehensive approaches.

2.2.1 AGE

Excess weight prevalence is significantly higher in people in mid-life and older ages. This is commonly associated with changes in lifestyle and reduction in physical activity as age increases.

The Health Survey for England, published in December 2022, found that those aged between 45-74 years are most likely to be overweight (excluding obese), (around 4 in 10) and those aged between 55-74 were most likely to be obese (around a third; 32%).^{25, 27} Younger adults (16-24) are most likely to be a healthy weight (72%), but also had the highest proportion underweight of all age-groups (6.4%).

Figure 4. BMI by age in adults (16+), England, 2021



Note: Underweight BMI was not captured by HSE by age and sex in 2021; estimates from the 2019 HSE was used instead.

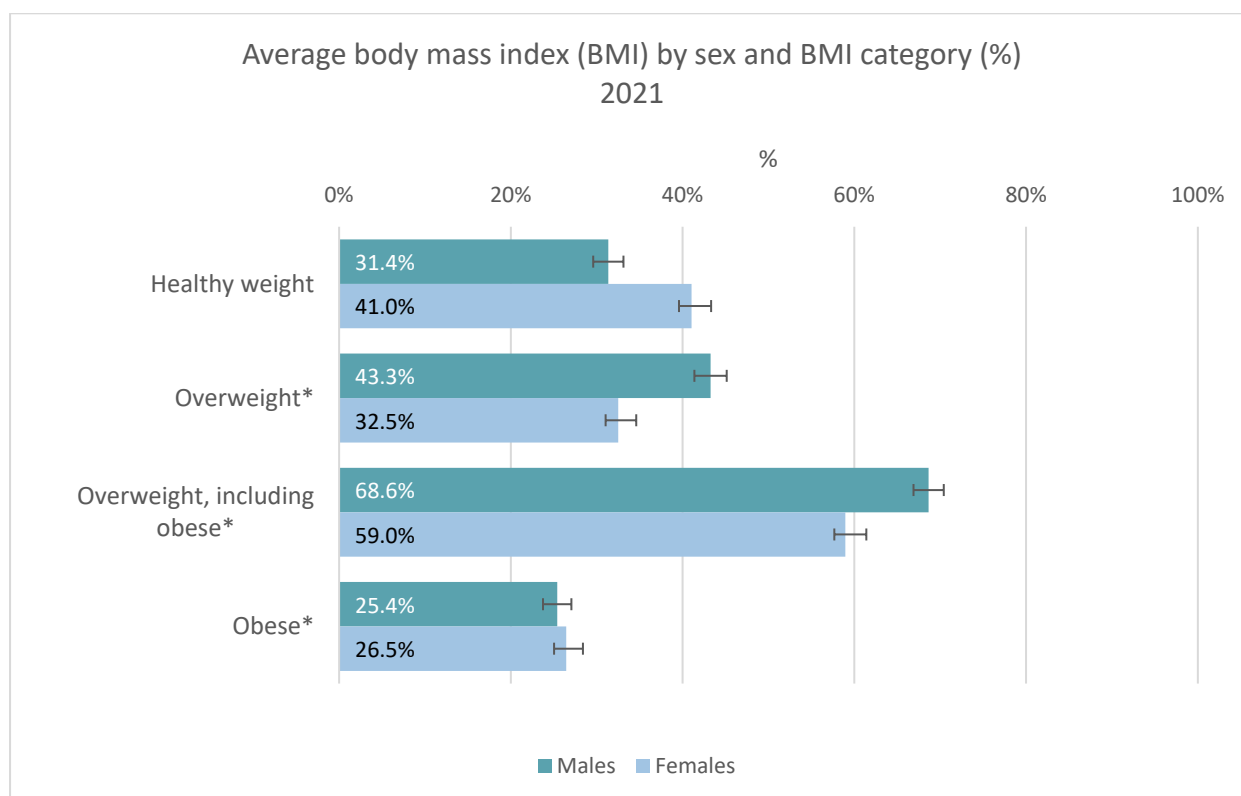
Source: Health Survey for England

2.2.2 SEX

Health risks attributed to excess weight differ between men and women, with hormones impacting on energy metabolism. Women with excess weight have a greater risk of type 2 diabetes, hypertension and myocardial infarction than men.

The Health Survey for England, published in December 2022, found that men are more likely than women to be overweight or obese (68.6% of men, 59.0% of women). However, women are marginally more likely to be obese (1 percentage point higher on average).²⁸

Figure 5. Average body mass index (BMI) of adults (16+), by sex, England, 2021



Note: *Corrected for height and weight.

Source: Health Survey for England

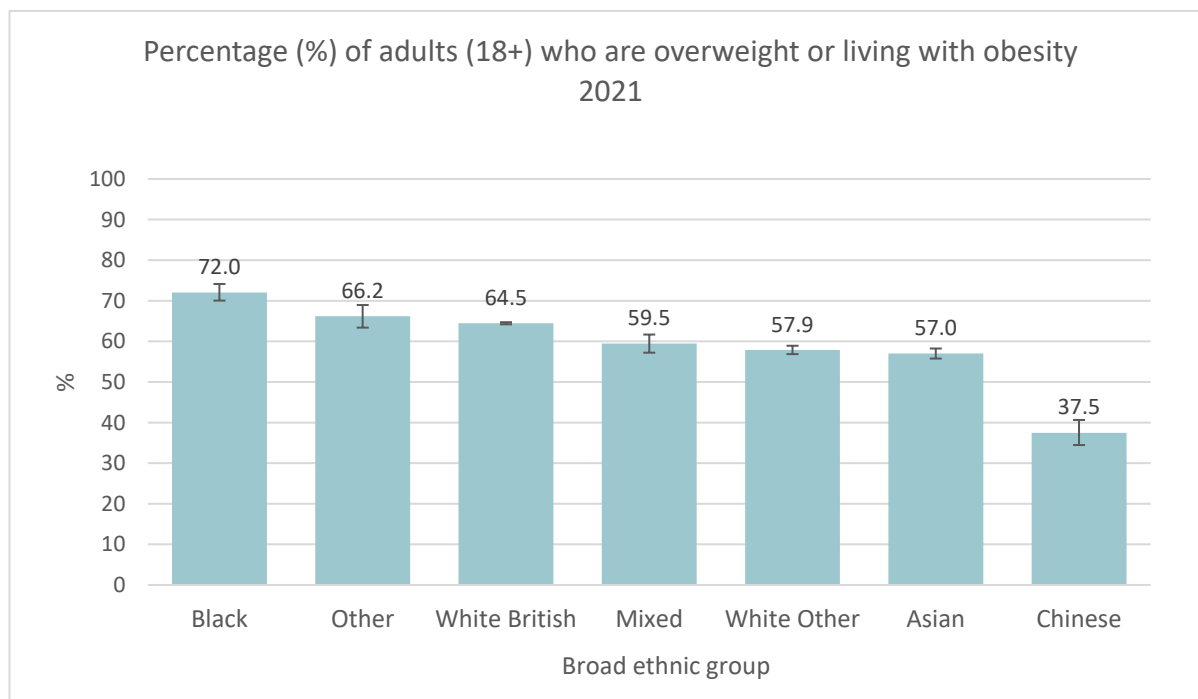
2.2.3 ETHNICITY

The chance of developing diabetes, heart disease and other weight-related health risks increase with increasing BMI. However there is strong evidence that at any given BMI, health risks are higher in some ethnic groups than others. For example Asians have a greater risk of developing type 2 diabetes than Whites with increased weight.²⁹

Data from the Active Lives Survey for England 2023 publication found that in the year to November 2021, 63.5% of adults (18+) were overweight or living with obesity; up from 62.8% the previous year. There were differences by ethnic group, with 7 in 10 (72%) adults of Black

ethnicity overweight or obese – the highest percentage out of all ethnic groups. Those of Chinese ethnicity had the lowest prevalence, with under 4 in 10 (38%) overweight or obese.³⁰

Figure 6. Overweight and obesity among adults (18+), by broad ethnic group, 2021



Source: Active Lives Survey (2023)

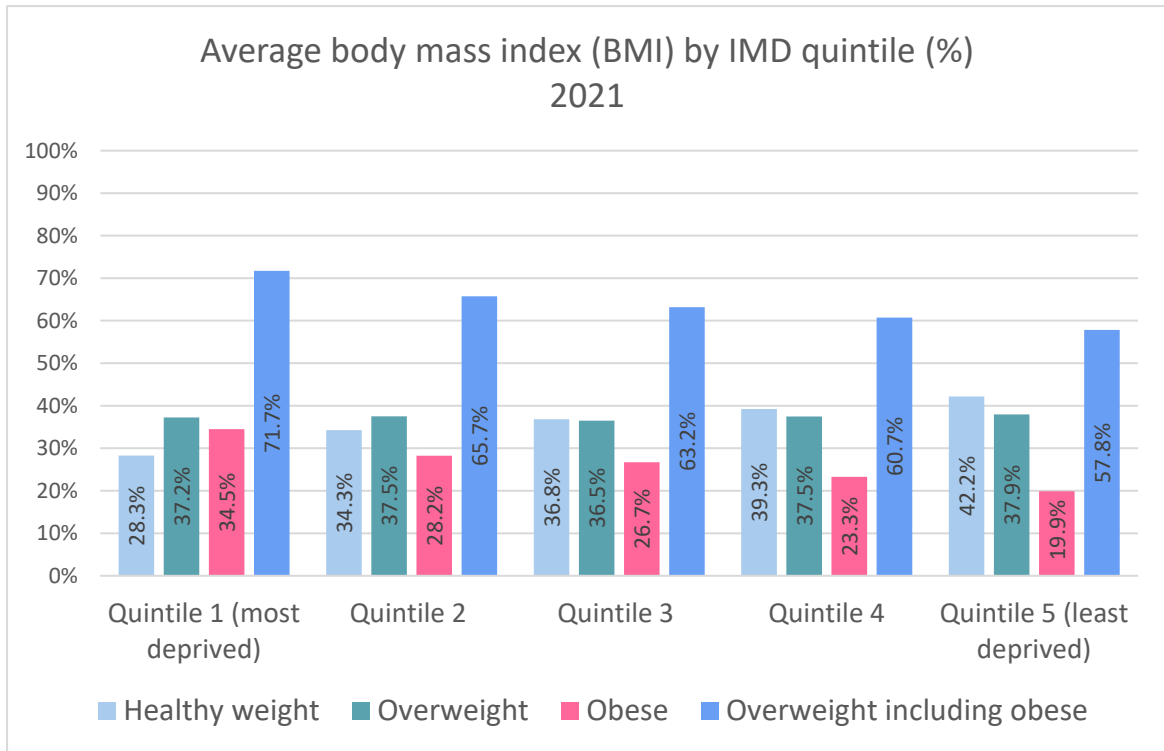
2.2.4 SOCIO-ECONOMIC DEPRIVATION

The Index of Multiple Deprivation (IMD) is a measure of area deprivation, based on 39 indicators, across seven domains of deprivation.³¹ IMD is a measure of the overall deprivation experienced by people living in a neighbourhood, although not everyone who lives in a deprived neighbourhood will be deprived themselves.

There is a strong correlation between deprivation and excess weight. A smaller proportion of individuals were overweight or obese in the least deprived quintiles (58%) compared to in the most deprived areas (71%).

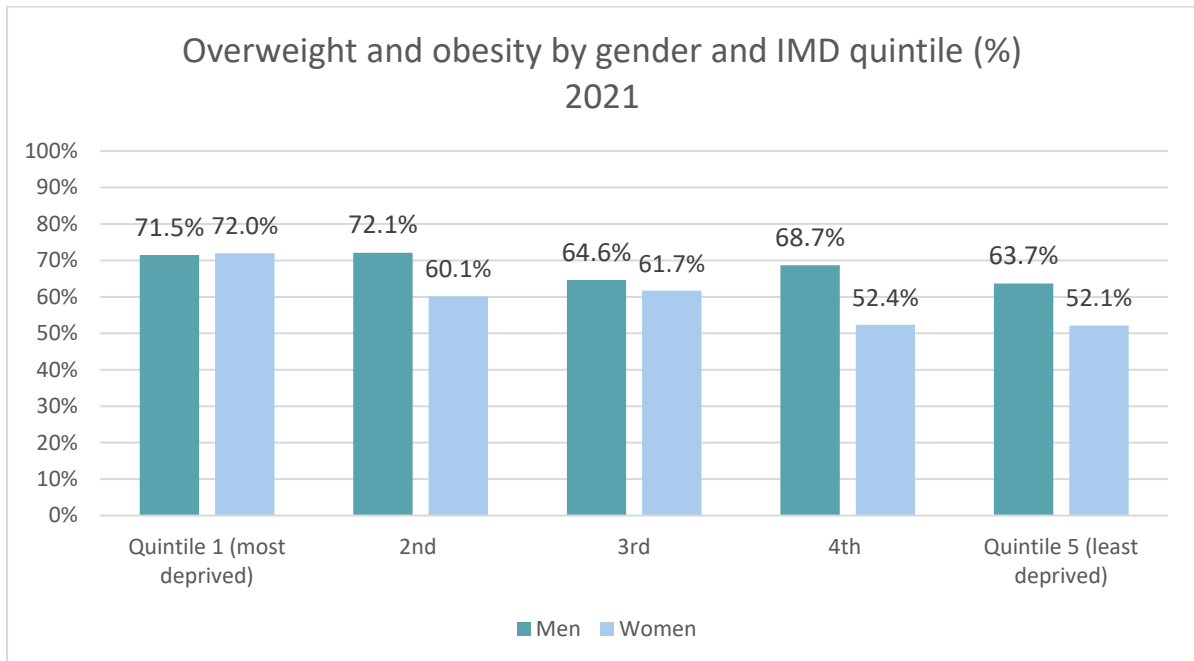
The proportion of men who were either overweight or obese was lowest in the least deprived quintile (64%) and highest in the most deprived quintile (72%). A much greater difference was seen for women than for men. For women, the proportion who were either overweight or obese was 52% in the least deprived quintiles, compared with 72% in the most deprived quintile.

Figure 7. Average body mass index (BMI) of adults (16+), by IMD quintile, 2021



Source: Health Survey for England

Figure 8. Overweight and obesity by gender and IMD quintile, 2021



Source: Health Survey for England

2.2.5 LONG-TERM LIMITING CONDITIONS

Long-term (lasting 12 months or longer) physical and/or mental health conditions or illnesses can limit an individual's ability to undertake day-to-day activities. Individuals may be less mobile and/or less able to undertake physically activity, which may impact their weight status. Unfortunately, the more a person deviates from a healthy weight, the more weight-related health conditions are likely to manifest.

In the 2021 Census, around 1 in 10 (10.2%) in England reported having a condition which affects their daily life 'a little', with a smaller proportion (7.5%) reporting it affects their daily life 'a lot'.³² Long-term conditions are more prevalent in older people, and prevalence has increased with ageing populations, but it is also more prevalent in deprived groups (those in the most deprived have a 60% higher prevalence than the least deprived and 30% greater severity of disease).³³

2.3 MODIFIABLE RISK FACTORS

Diet and lifestyle factors contribute to development of overweight and obesity. Consuming high amounts of energy in foods, particularly found in high fat and high sugar foods and not using this energy through physical activity will result in the energy being stored in the body as fat.

2.3.1 PHYSICAL ACTIVITY

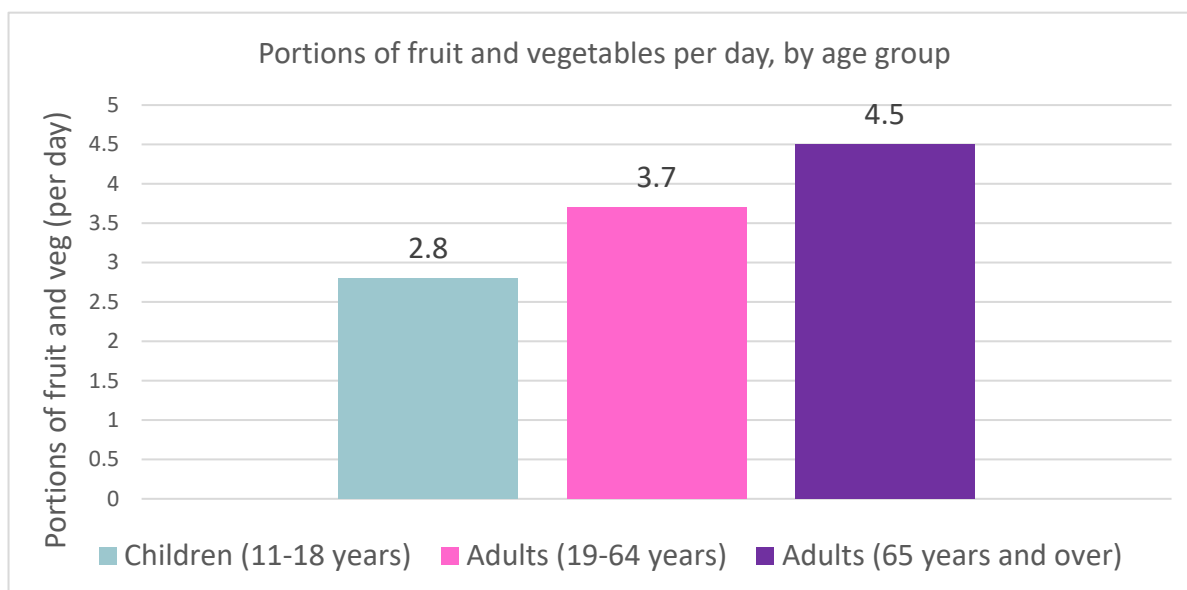
Despite the highly publicised benefits of physical activity, many adults in the UK do not meet the recommendations of 150 minutes (2 1/2 hours) of moderate intensity activity (such as brisk walking or cycling) or 75 minutes of vigorous intensity each week (such as jogging). Nationally, nearly 3 in 10 adults do not meet this guideline.

2.3.2 DIET

Public Health England commissioned a survey on 1,000 adults and children to assess habitual dietary patterns between August and October 2020.

The results showed that daily mean consumption of fruit and vegetable was below the recommendation (five-a-day) in all age or sex groups; with fruit and vegetable intake increasing with age (Figure 9).

Figure 9. Portions of fruit and vegetables per day, by age-group, England



Source: Public Health England

The mean number of five-a-day portions was lower for participants in households with more financial insecurity, with on average 2.7 portions per day in households reporting to manage less well financially, compared with 4.0 portions per day in households who reported being financially stable.

Moreover, participants living in households with more financial insecurity consumed on average more sugar-sweetened drinks, with those managing less well financially drinking on average 108g per day of sugar-sweetened soft drinks compared with 43g per day for those in households living comfortably financially (Figure 10).

Figure 10. Household financial status by fruit and veg and sugary-drink consumption, England

Household Financial Status	Fruit and Vegetable Portions per Day	Sugar-Sweetened Soft Drinks per Day (g)
Managing less well financially	2.7	108
Living comfortably/financially stable	4.3	68
Financially stable	4.0	43

Source: Public Health England (UKHSA)

These findings show that the average person in England is still not meeting the recommended daily fruit and vegetable portions and are still consuming a high proportion of their sugar allowance within sugar-laden drinks, regardless of household financial circumstances. However, these findings do highlight the differences across socio-economic gradients, with those experiencing more financial insecurity eating less fruit and veg and consuming more sugar-sweetened drinks.

2.3.3 ALCOHOL

Alcoholic drinks are typically devoid of any nutrients while also being high in calories, and high consumption, or consumption over a sustained period, is likely to lead to a surplus of energy and weight gain if not managed.

In the Health Survey for England (2021), 79% of participants reported that they had drunk alcohol in the last 12 months, and 49% reported that they drank alcohol at least once a week. A higher proportion of men than women drank alcohol, and above the recommended limits; nearly 3 in 10 (28%) of men drank over 14 units in the last week, compared to 15% for women.

Figure 11 outlines the varying alcohol content of different alcoholic drinks.³⁴

Figure 11. Calorie content by different types of alcoholic drinks (Kcal)



Source: Alcohol Change UK

2.3.4 MATERNAL OBESITY

Mother and child are at higher risk of developing health conditions during and after pregnancy if the mother carries excess weight. Babies born to mothers with severe excess weight are

significantly more likely to experience excess weight into adulthood, caused by biological changes that occur during pregnancy. Moreover, women who have severe excess weight are more at risk of stillbirth and complications during pregnancy and/or labour.

Nationally, around half of women of childbearing age currently have excess weight and this proportion has been increasing steadily over recent years. Research indicates that excess weight in new mothers increases with age, deprivation and is also more common among those of Black ethnicity.

2.3.5 BREASTFEEDING

Breastfeeding is often cited as one of the most effective ways to ensure child health and survival; it is considered the most optimal food for infants (if the mother is physically able). It has a multitude of benefits for the baby, but there are also additional health benefits for the mother. Breastfeeding increases energy expenditure for the mother and can help with a mother's weight management.

Breastfeeding also confers benefits to the child with regards to their likelihood to gain weight in adulthood, with research showing that children who were breastfed for 6 or more months were significantly less likely to be overweight and obese compared to those who were not breastfed in later childhood.³⁵

2.3.6 TYPE 2 DIABETES

Type 2 diabetes is a common condition caused by problems with insulin in the body and resulting in high blood sugar levels. It is often linked to being overweight or inactive, or to a family history of type 2 diabetes. It is a leading cause of premature mortality and increased risk of serious problems with eyes, heart and nerves, kidney failure and many of the common types of cancer.³⁶

The best course of action is prevention. Encouraging a balanced diet high in fruit and vegetables, fibre, and less alcohol and sugar-sweetened drinks and desserts, along with regular exercise, is the best preventative measure for reducing risk of type 2 diabetes.

The NHS Diabetes Prevention Programme identifies people at risk of developing type 2 diabetes and refers them to a lifestyle change program to support weight management, healthier eating and increased physical activity.³⁷

The NHS Long Term Plan also sets out a range of improvements for those at risk or living with type 2 diabetes.³⁸

3.0 THE LEVEL OF NEED IN THE POPULATION

3.1 LOCAL CONTEXTUAL FACTORS

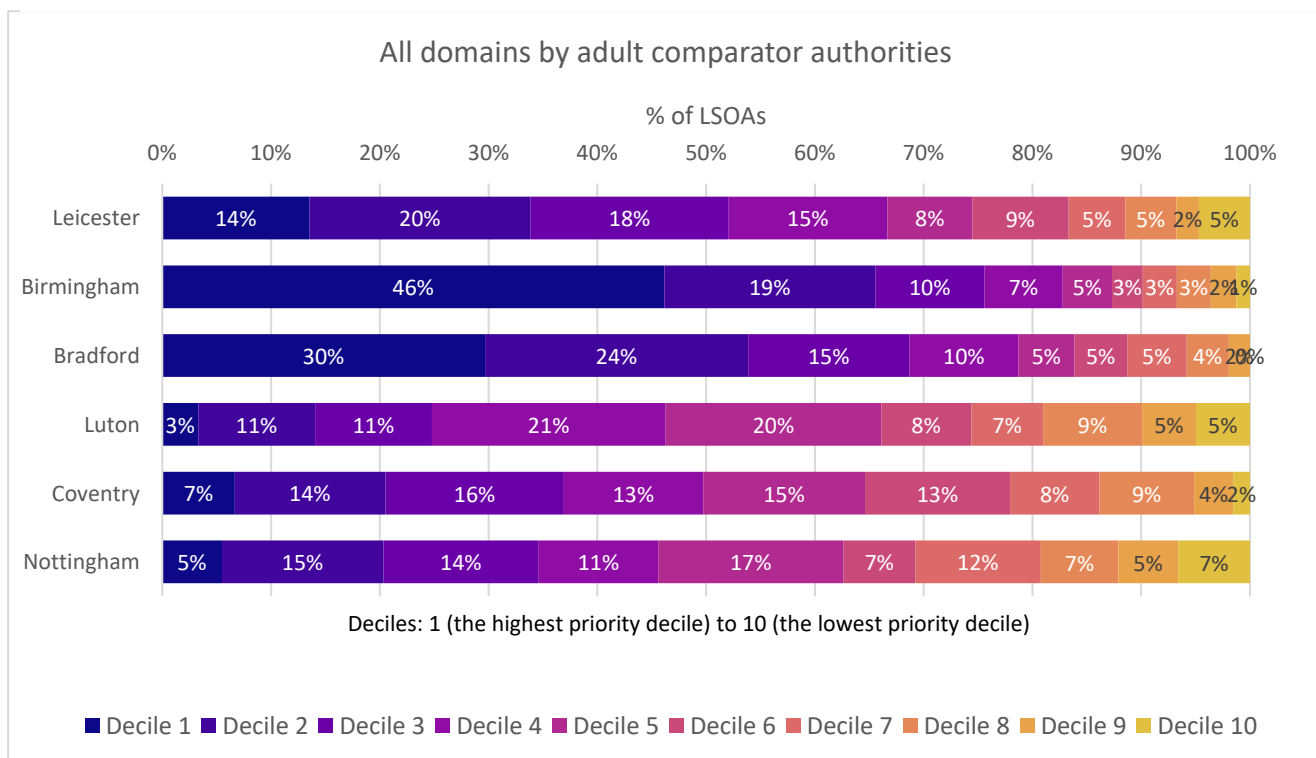
The socio-demographic characteristics of a population, particularly age and ethnicity, can impact on population weight status. Leicester has a population of nearly 370,000 and has a younger age structure compared to England. It is the 32nd most deprived Local Authority in England with over two thirds of the population living in the most deprived 40% of areas nationally.

Leicester is home to many communities of different ethnicities, languages and faiths, with over half (59%) from non-white British backgrounds. Leicester has a greater Asian population (43%) compared to the national average (10%) and evidence shows a great risk of diabetes in the Asian population compared to the White population.²⁹

Nearly 1 in 10 (9%) reported they have poor English proficiency, which will impact on health literacy.³² Additional external factors particularly observed in urban, deprived areas like Leicester including poor housing, fuel poverty, air pollution, access to green space, and the local environment also have a significant adverse impact on health behaviours.

Data released from the Priority Places for Food Index in 2023, found that for Leicester overall, across 7 domains relating to food insecurity, the majority of Leicester are within the higher priority deciles 1- 5 (74%) (deciles out of 10; 10 being the lowest priority) (Figure 9). Areas of particularly high priority in Leicester included access to e-commerce (access to online services and use of shopping online), socio-economic barriers (income deprivation and/or no access to a car), family food support (density/proximity of food banks and use of Healthy Start vouchers) and fuel poverty (household fuel poverty and/or use of a pre-payment metre) which all influence food choices and diet. However, Leicester performed well with regards to proximity and accessibility to supermarkets and non-supermarket food outlets.³⁹

Figure 12: Overall domains by local authority (decile 1; highest priority - decile 10; lowest priority)



Source: Priority Places for Food Index, Consumer Data Research Centre [Priority Places for Food Index | CDRC Data](#)

3.2 LOCAL PREVALENCE

3.2.1 WEIGHT CATEGORIES IN LEICESTER RESIDENTS

In Leicester, based on self-reported BMI from the latest Health and Wellbeing Survey of adults in 2018, half of respondents (50%) were reported to carry excess weight; nearly half (46%) reported to be of a healthy weight. A smaller proportion (4.2%) reported to be underweight. The survey found very modest differences when split by gender; a slightly lower percentage of women reported healthy weight compared to men, and higher percentage of women reported being obese. There is no statistical difference in weight categories for men and women.

Note: It is important to note that this survey relies on self-reported data which may impact validity of the findings.

Figure 13: Weight categories of Leicester adults by gender

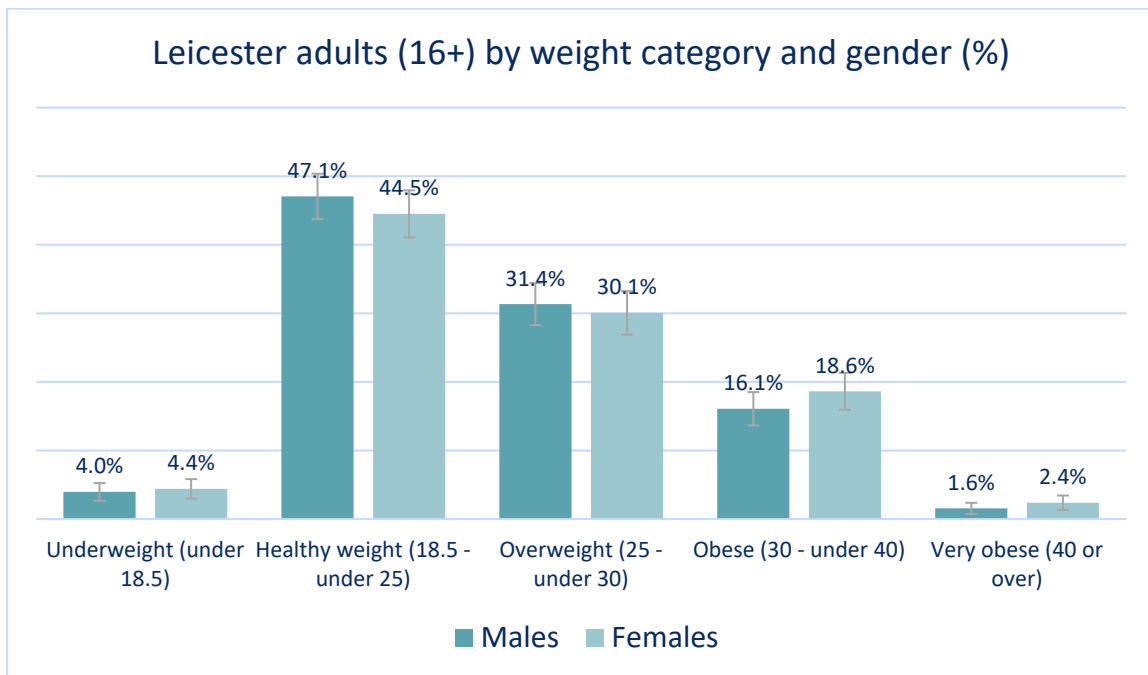
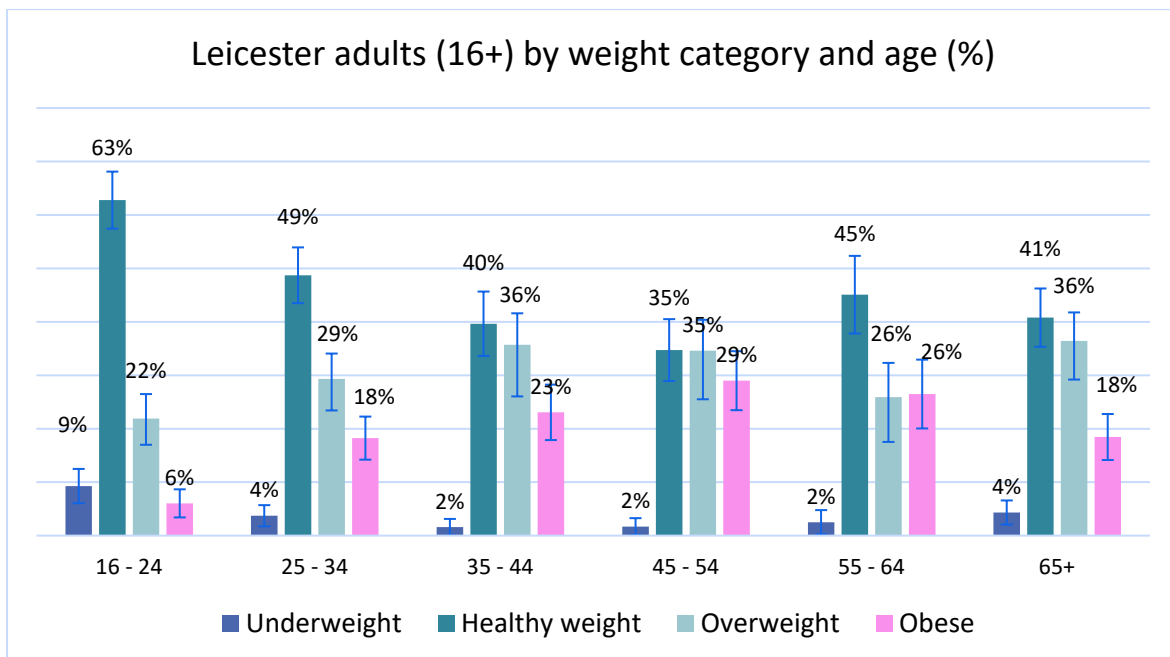


Figure 14: Weight categories of Leicester adults by age group

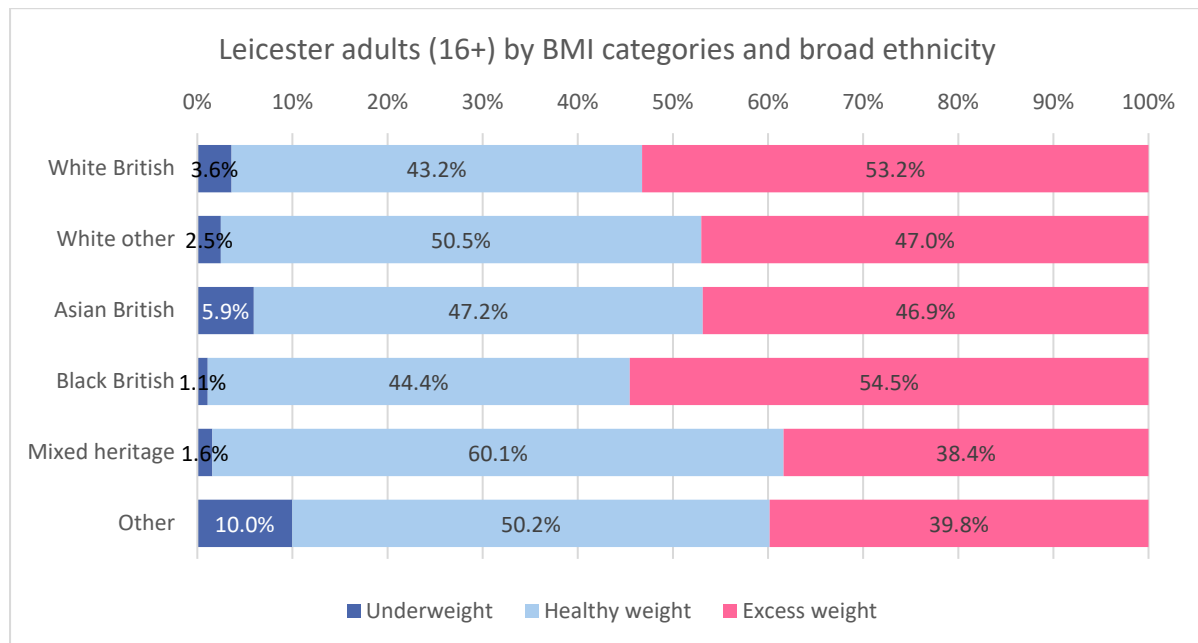


Source: Leicester’s Health and Wellbeing Survey (Adults)

Young people (16-24) show significantly higher levels of healthy weight and significantly lower levels of overweight and obese compared to older age groups. With increasing age between 25 and 54, there are decreasing levels of healthy weight and increasing levels of overweight/obesity. Over 55 into older ages, levels of obesity show a decrease.

When looking at differences by broad ethnicity, those of Black British (55%) and White British (53%) ethnicity were more likely to carry excess weight. There was a higher proportion reporting to be underweight amongst the 'Other' ethnic group (10%) and Asian British (6%).

Figure 15. Leicester adults (16+) by BMI categories and broad ethnicity

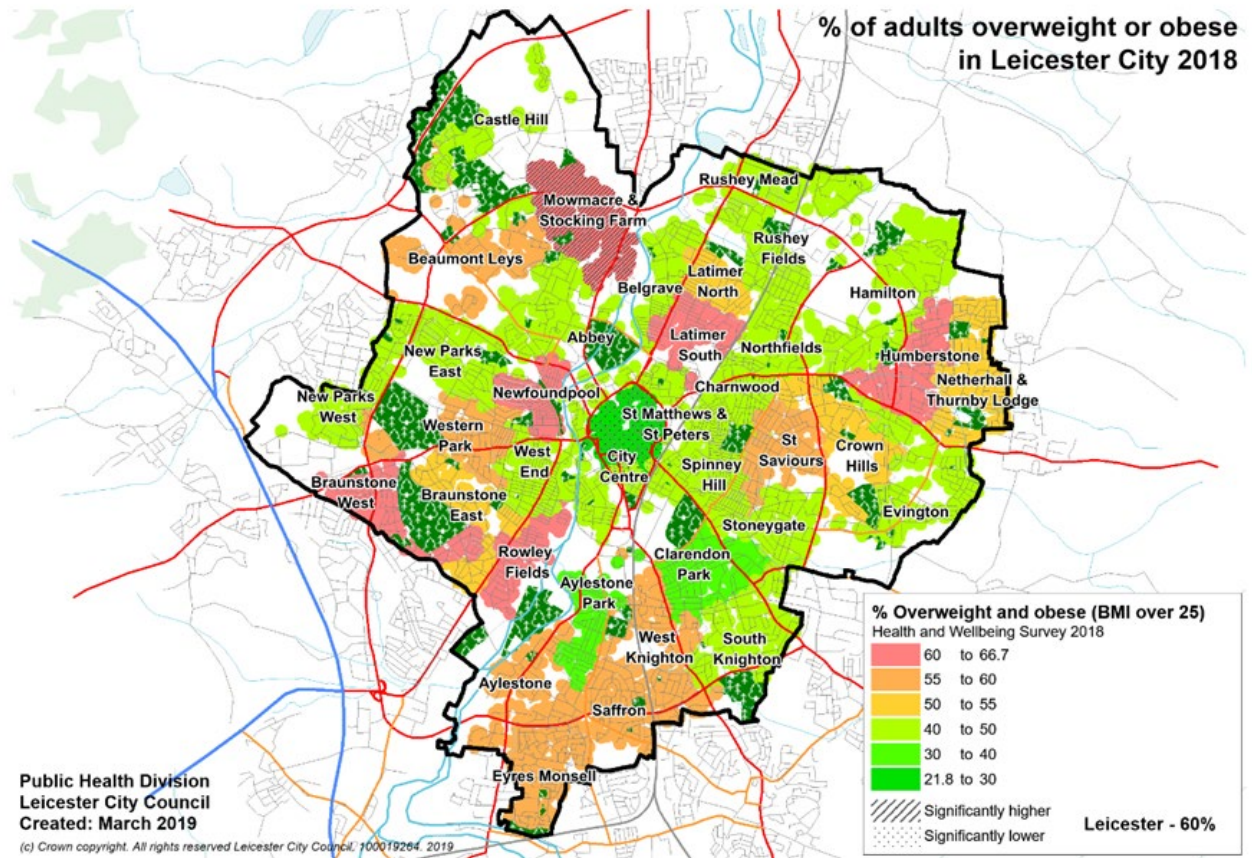


Notes: It is important to note that this survey relies on self-reported data which may impact validity of the findings. Data may not sum to 100% due to omission of those who responded 'they don't know'.

Source: Leicester's Health and Wellbeing Survey (Adults)

Small area estimates from the Leicester Health and Wellbeing Survey 2018 show geographic variation of excess weight within the city. Prevalence is generally higher in the south and west of the city, with significantly higher levels in Mowmacre and Stocking Farm (Figure 15).

Figure 16: Prevalence of excess weight across the city, 2018



Source: Leicester’s Health and Wellbeing Survey (Adults)

The survey also found excess weight was significantly higher among those who were off sick from work/disabled (68%) and those who were social renters (61%), highlighting the complex nature of addressing weight status when lifestyle circumstances have such a bearing on weight status.

3.2.2 EXCESS WEIGHT PREVALENCE (GP DATA)

Data from the GP register showed not all patients have their BMI recorded. As part of the Quality Outcomes Framework, patients with a diagnosed long-term condition should have their BMI recorded regularly as part of their long-term condition management.

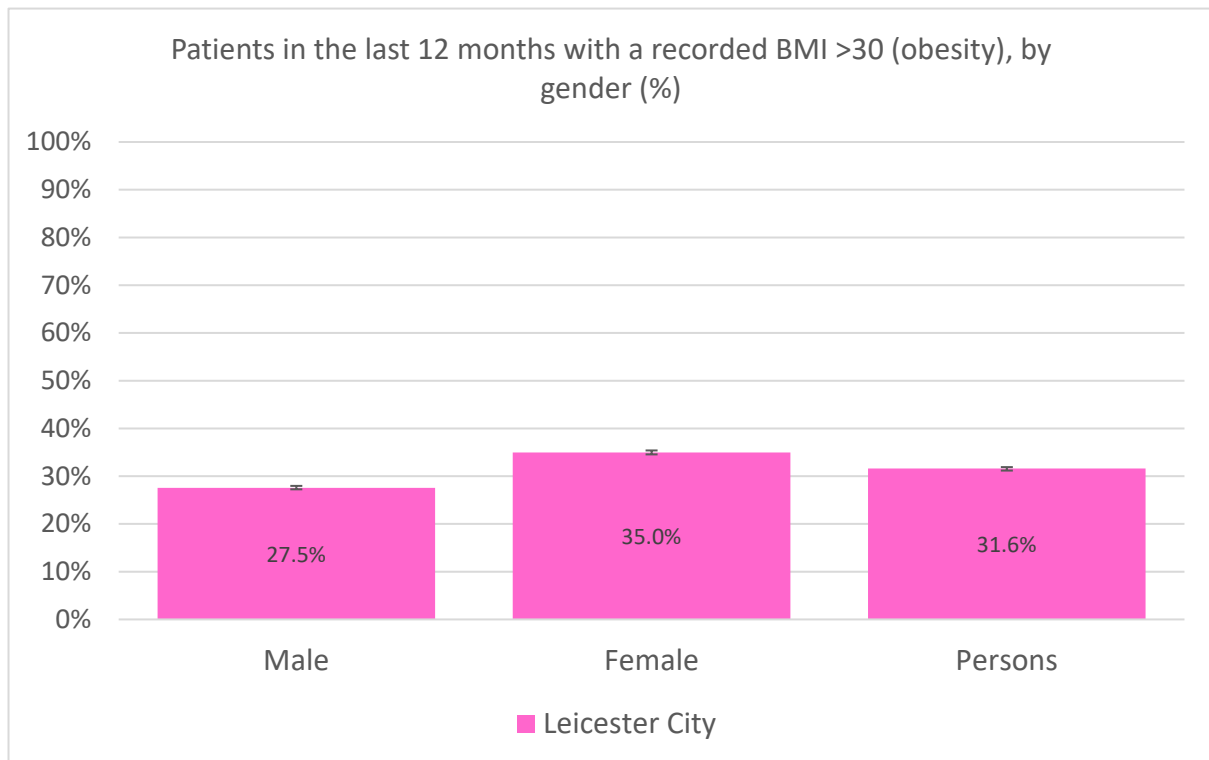
In terms of all registered patients in Leicester GP Practices, 27% of over 18s have a BMI recorded in last 12 months. Of those with a recorded BMI, 32% have a BMI over 30 (obese classification). The proportion of the adults with a BMI over 30 increased from age 30, with younger adults (18-29yrs) less likely to be obese (Figure 16).

Obesity estimates from the GP disease register are higher than the 2018 Health and Wellbeing Survey estimates. However, this could be because those who are obese are more

likely to be in contact with their GPs for weight related health conditions, and therefore likely to have their BMI recorded by their GP.

Figure 17 shows differences in recorded obesity rates between males and females across the city. Females are marginally more likely to be obese.

Figure 17. GP Patients (18+) with a recorded BMI >30 (obesity) in last 12 months, by gender (%), 2023

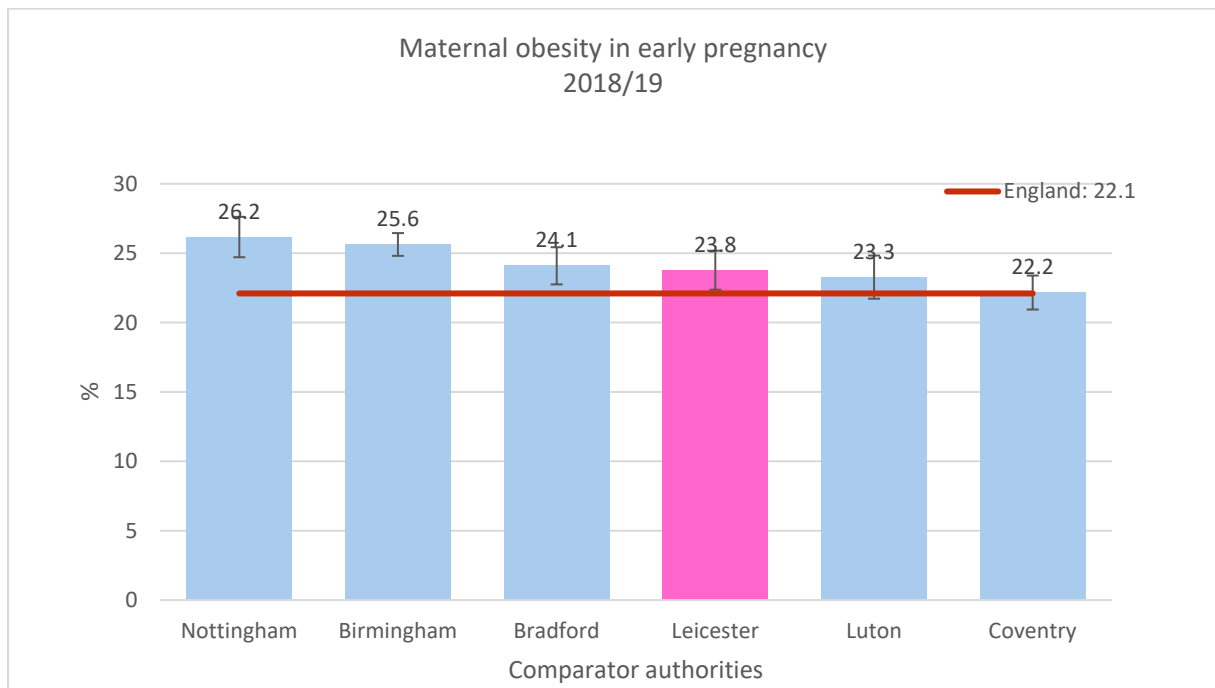


Source: Leicestershire Health Informatics Service (LHIS)

3.2.3 MATERNAL EXCESS WEIGHT

In Leicester, the latest estimates reveal that nearly a quarter (23.8%) of maternities recorded obesity (BMI >30) at the time of booking an appointment with a midwife in 2018/19, which is significantly worse than the national average (22.1%). Overall, Leicester had a similar rate to its comparator authorities (Figure 18).

Figure 18. Maternal obesity in early pregnancy (at time of booking appointment), 2018/19



Source: Fingertips, Office for Health Improvement and Disparities (OHID)

3.2.4 DIABETES PREVALENCE

There is a close relationship between excess weight and Type 2 diabetes; a sevenfold increase in risk of developing Type 2 diabetes for those who are obese and a threefold increase among those who are overweight.⁴⁰ There is also an increased risk of developing diabetes in the Asian population.

In 2021/22, there were 33,585 patients registered with diabetes across the 57 practices in Leicester City.⁴¹ The prevalence of diabetes in Leicester has been on an upward trajectory for the past two decades and is continuing to rise. The local prevalence is 10% of all 17-year-olds or older who are registered to a GP. It remains significantly higher than the national rate (7.3%). In the latest year 2021/22, Leicester has the highest prevalence of recorded diabetes compared to its comparator authorities.

Of the 10% that have recorded diabetes within the city, around 93% have type-2 diabetes. Based on the local recorded prevalence, it would suggest around 30,000 people within the city have diabetes. However, research has shown that the true figure may be higher with around 17,000 likely to be pre-diabetic within the city and a further 6,600 estimated to have type 2 diabetes but remain undiagnosed.⁴²

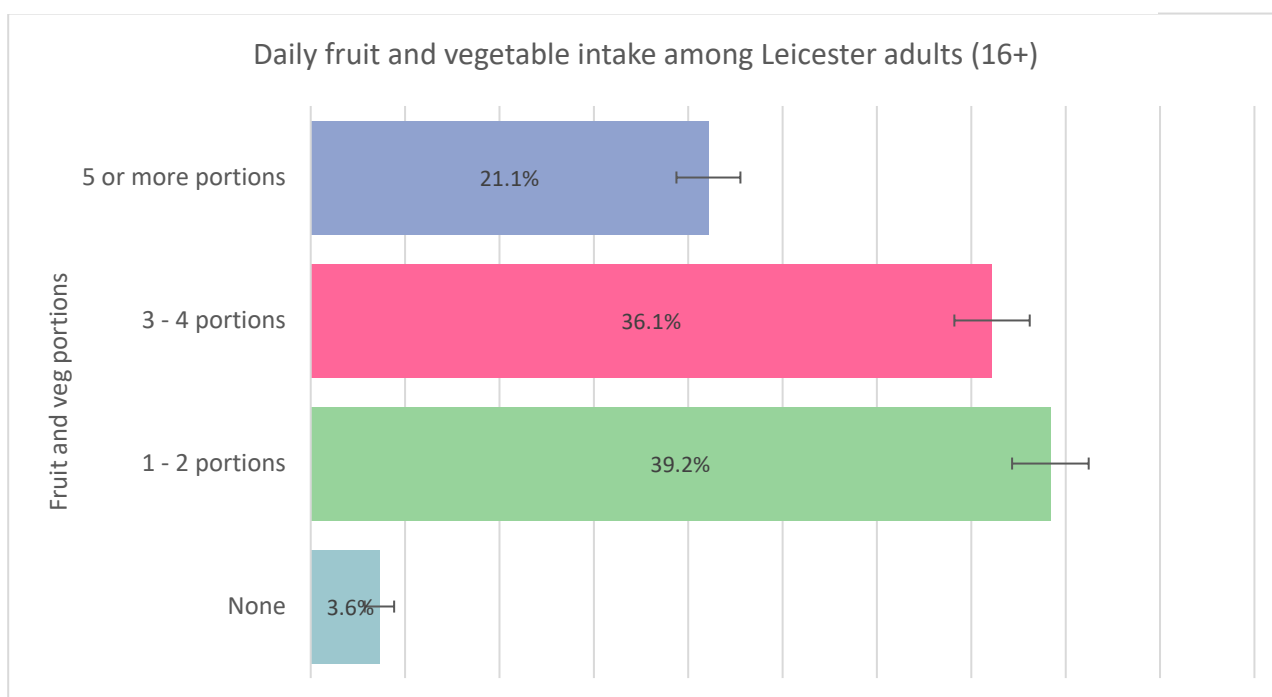
*More information can be found in the diabetes JSNA, here: [Diabetes \(leicester.gov.uk\)](https://www.leicester.gov.uk/health-and-social-care/health-improvement-and-disparities/fingertips/diabetes/)

3.3 DIET

The latest health and wellbeing survey of adults (2018) revealed only around 2 in 5 (21%) of Leicester residents eat 5 or more portions of fruit and veg per day, which is lower than the national rate of 26%.

Younger people are least likely to eat the recommended amount of fruit and veg; with just 7% of 16–19-year-olds eating 5-a-day. Residents who are active ($\geq 150+$ minutes exercise per week), and homeowners are amongst those most likely to get their 5-a-day.

Figure 19. Fruit and veg portions among Leicester adults (16+), 2018

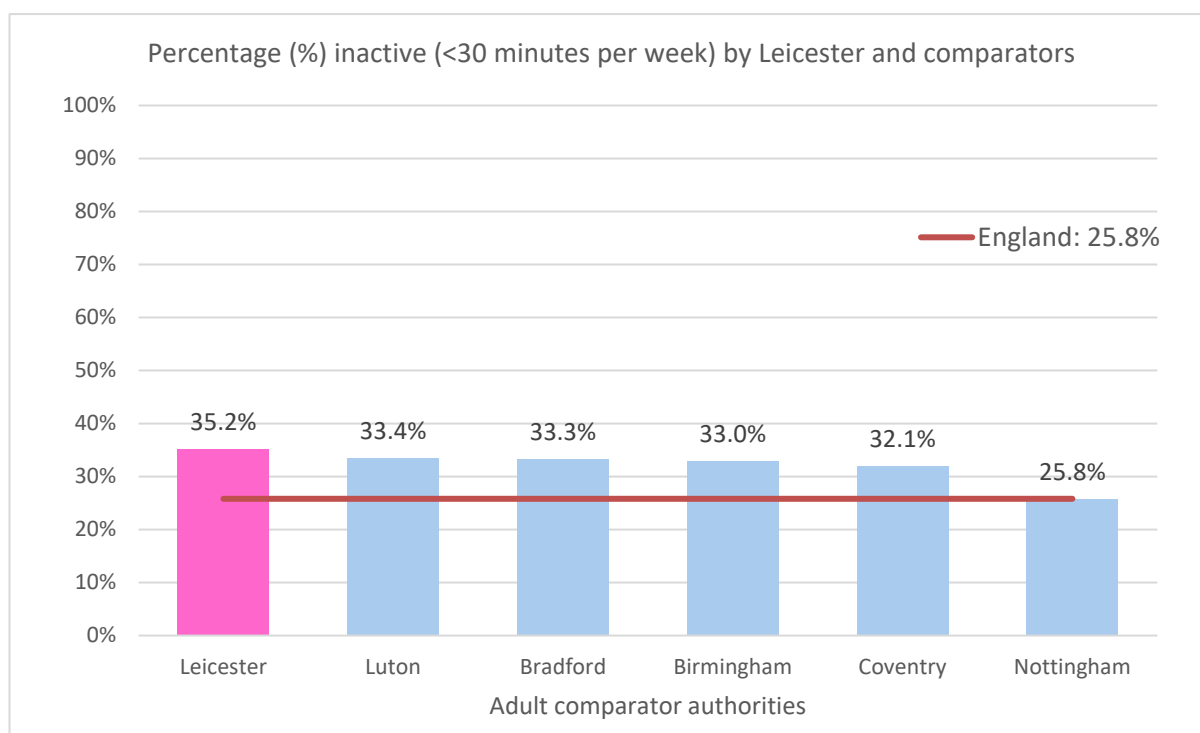


Source: Leicester's Health and Wellbeing Survey (Adults)

3.4 PHYSICAL ACTIVITY

The 2021/22 Active Lives Survey revealed Leicester has the highest rate of inactivity compared to its local authority comparators and is significantly higher than nationally. Just over a third (35.2%) of Leicester’s population aged 16+ did less than 30 minutes of physical activity per week and are therefore classed as physically inactive compared to a quarter (25.8%) in England overall.

Figure 20. Percentage of inactivity per week, by Leicester and comparators, 2021/22



Source: Active Lives Survey (2023)

There has been a modest decrease between 2020/21 and 2021/22 (around 1 percentage point) but has still not returned to pre-pandemic levels (Figure 24).

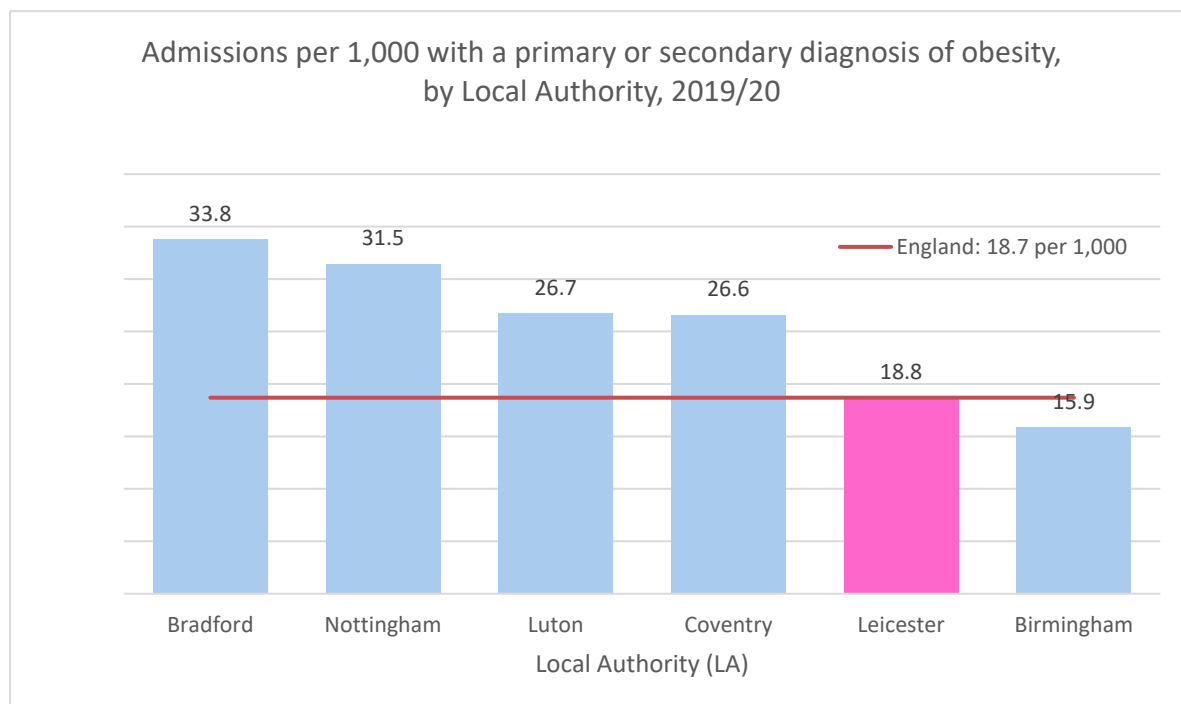
*More information can be found in the physical activity JNA, here: [Physical activity \(leicester.gov.uk\)](https://www.leicester.gov.uk/physical-activity)

3.5 HOSPITAL ADMISSIONS

3.5.1 EXCESS WEIGHT

In 2019/20, there were 5,790 hospital admissions with a primary or secondary diagnosis of obesity by local authority in Leicester, equating to 1,876 admissions per 100,000. This is lower than most comparator authorities and similar to the national rate.

Figure 21. Admissions directly or indirectly attributable to obesity, 2019/20

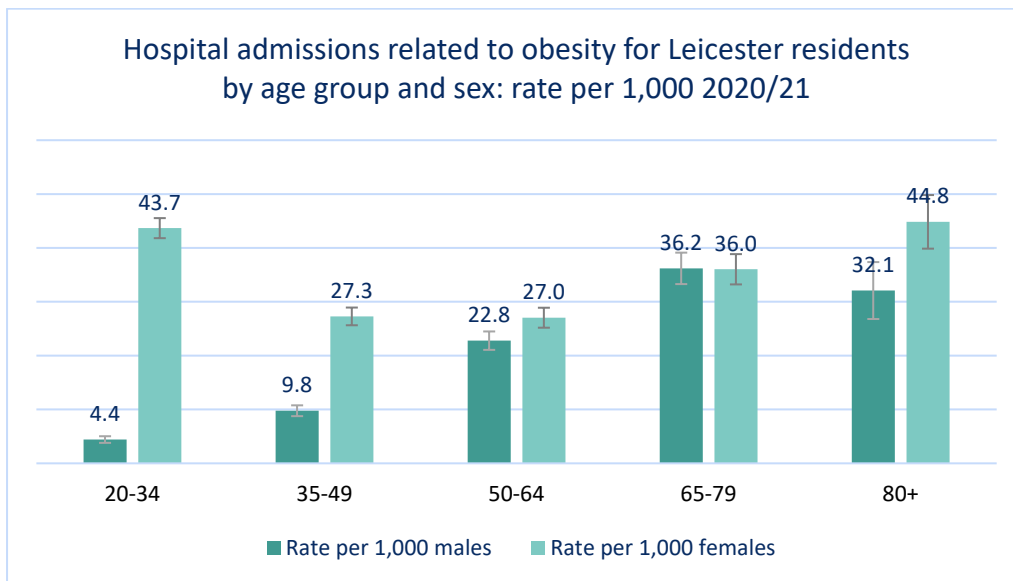


Source: NHS Digital [Statistics on Obesity, Physical Activity and Diet 2021: Data tables - NHS Digital](#)

In 2020/21, there were nearly 7,000 hospital admissions where obesity was recorded as a primary or secondary diagnosis. The number of obesity-related admissions has been increasing annually and has doubled since 2016/17.

Over a quarter of obesity-related hospital admissions are associated with pregnancy and childbirth. Figure 22 shows hospital admission rates relating to obesity are generally higher in females compared to males, with the highest rates in females 20-34 and over 80 years old. For females 20-45 years, these higher admission rates are likely to be related to maternal obesity.

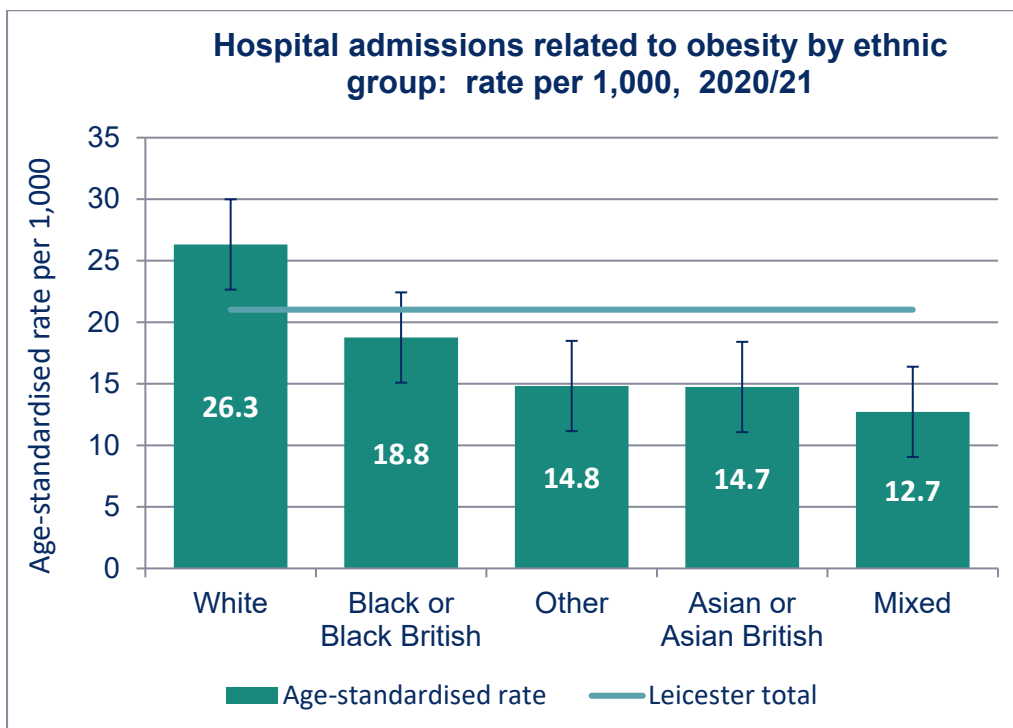
Figure 22: Hospital admission rates related to obesity by age and sex, 2020/21



Source: Hospital Episode Statistics, ONS Population estimates

By broad ethnic group, those of White ethnicity (26 per 1,000) had significantly higher rates than the Leicester average (21 per 1,000) and all other ethnic groups.

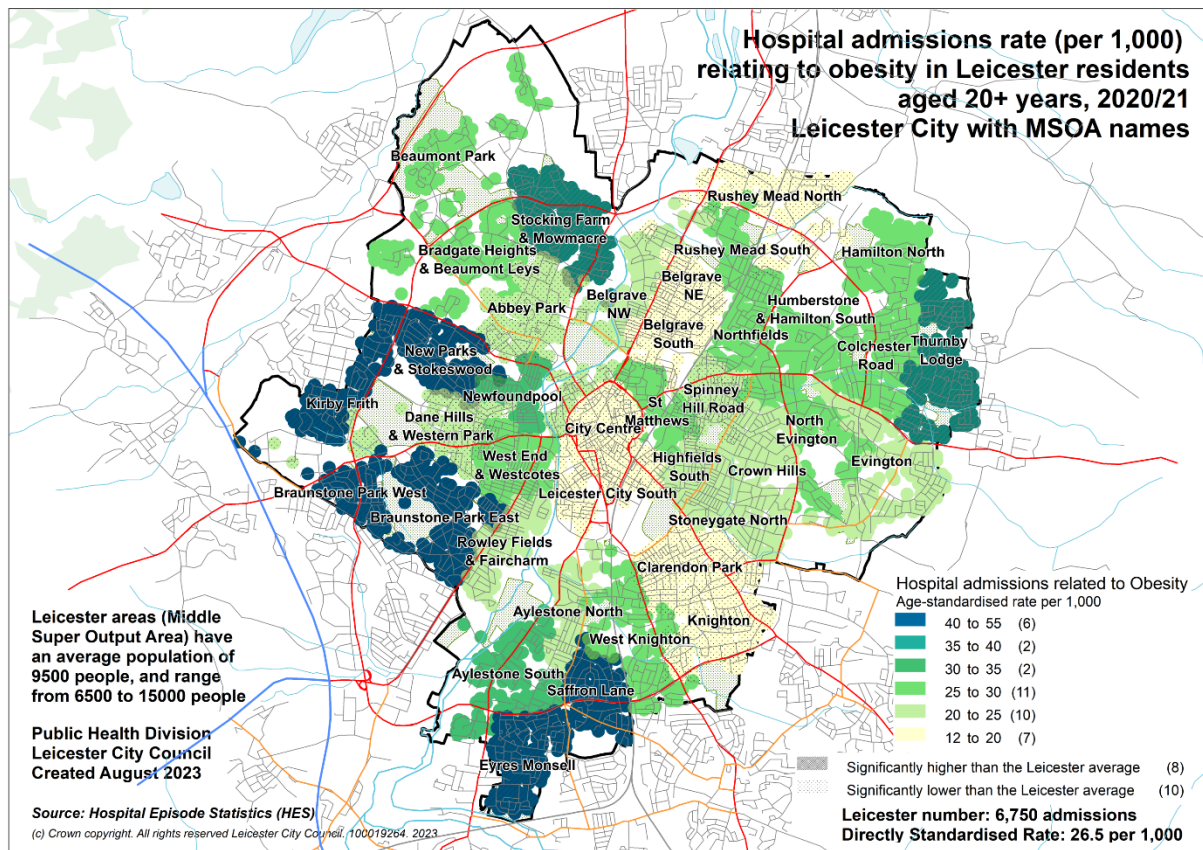
Figure 23: Hospital admission rates related to obesity by ethnic group



Source: Hospital Episode Statistics, ONS Population estimates

By local area (Middle Super Output Area), obesity-related hospital admission rates are significantly higher in New Parks, Kirby Frith, Braunstone, Saffron, Eyres Monsel, and Thurnby Lodge. Significantly lower rates are seen in the Rushey mead North, Belgrave, City Centre, Clarendon Park and Knighton.

Figure 24: Obesity-related hospital admission rates in Leicester residents by MSOA, 2020/21



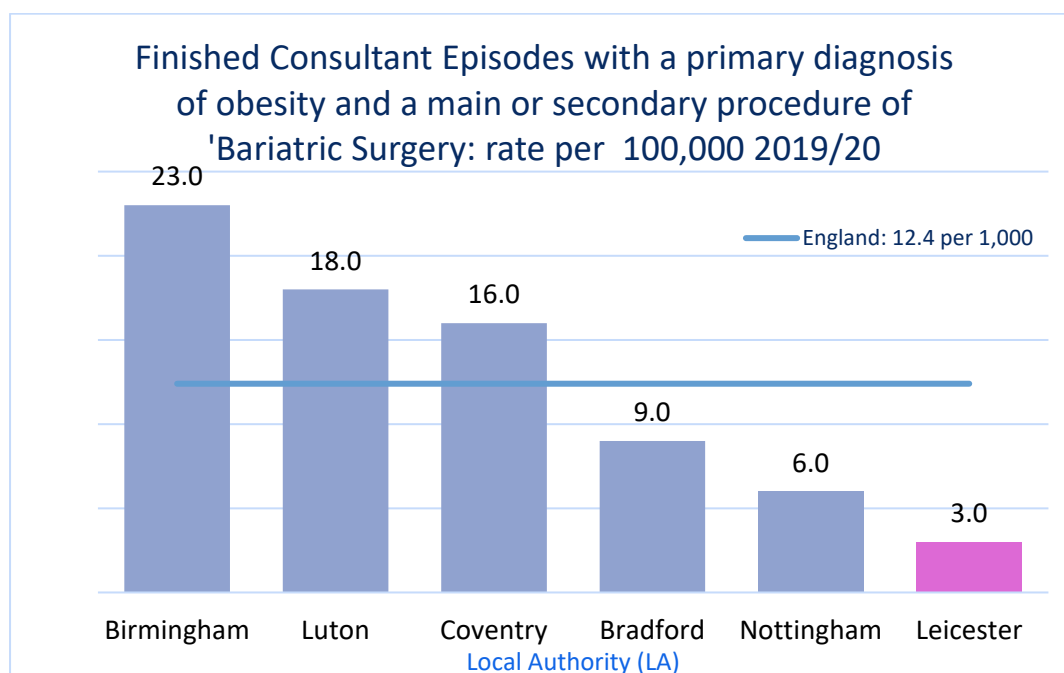
Source: Hospital Episode Statistics, ONS Population estimates

Weight loss surgery, also called bariatric surgery is sometimes used as a treatment for people who are very obese. It can lead to significant weight loss and help improve may obesity-related conditions such as type 2 diabetes or high blood pressure.

The figure below shows levels of bariatric surgery in Leicester and comparator areas.

Birmingham has the highest rate of bariatric surgery (23 episodes per 100,000) and Leicester has the lowest (3 episodes per 100,000). From figure 20 above, Birmingham has the highest obesity-related hospital admission rate whilst Leicester had the second lowest.

Figure 25: Hospital admission rates for bariatric surgery, 2019/20



Source: NHS Digital [Statistics on Obesity, Physical Activity and Diet 2021: Data tables - NHS Digital](#)

3.6 MORTALITY

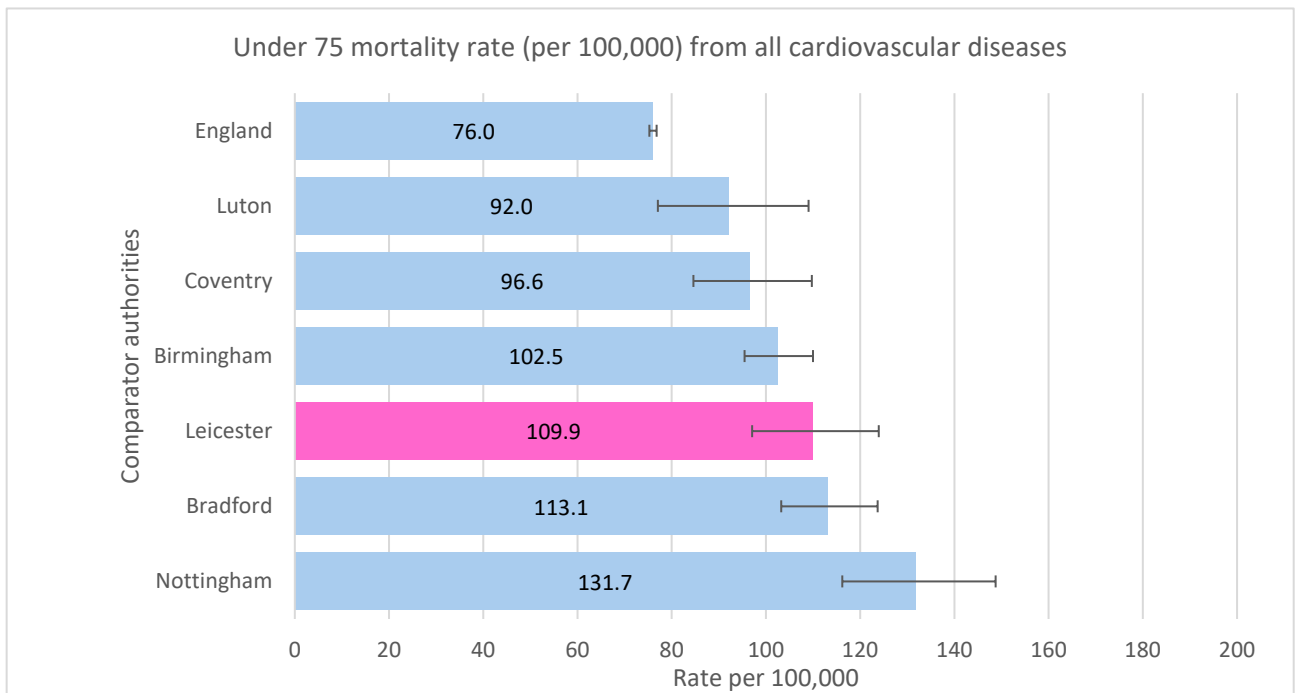
Being overweight or obese is associated with an increased risk of premature death from causes including coronary heart disease, stroke, respiratory diseases and stroke. Overall, the risk of premature death (before age 70) among those who are overweight or obese is about three times higher in men compared to women.⁴³

3.6.1 CARDIOVASCULAR DISEASE (CVD)

Cardiovascular disease (CVD) is largely a preventable disease and closely related to lifestyle and weight status. The research has shown that risk of cardiovascular disease is significantly higher among those who carry excess weight compared to their normal weight counterparts. There is emerging evidence that underweight populations are also at greater risk of CVD.^{44, 45}

The premature mortality rates (deaths under 75 years) from all cardiovascular diseases (including heart disease and stroke) in Leicester is around 110 per 100,000. Compared to comparator authorities, Leicester has the third highest rate, and it is significantly higher than the national rate (Figure 18).

Figure 26. Under 75 mortality rate (per 100,000) from all cardiovascular diseases, 2021



Source: Fingertips, Office for Health Improvements and Disparities [Public health profiles - OHID \(phe.org.uk\)](https://publichealthprofiles.org.uk)

Note: Excess weight is often a risk factor for other co-morbidities e.g. cancer, heart disease, diabetes or cancer, and therefore mortality is normally attributed to the aforementioned secondary causes and excess weight is rarely recorded on the death certificate. In this way, mortality where excess weight was a contributing factor is likely to be underestimated.

4. CURRENT SERVICES IN RELATION TO NEED

4.1 OVERVIEW OF SERVICES

There are many key partners in addition to the summarised assets and provision below who can and do play an important role in tackling excess weight in adults including community groups, emergency services, food banks, social prescribers, healthcare workers and dentists.

4.2 LIFESTYLE RELATED ASSETS

4.1.1 ALLOTMENTS AND FOOD GROWING

Leicester has 43 allotment sites and over 3,000 plots, 11 of which are managed directly by the local authority and are spread across the city. Historically allotments played a crucial role in maintaining the nation's food supplies during the World Wars, more recently allotments provide people with healthy outdoor exercise, cheap home-grown food, and the company of like-minded people from different social and cultural backgrounds to help combat social isolation and help with mental health.

4.1.2 ACTIVE LEICESTER: LEISURE CENTRES AND OUTDOOR GYMS

Sport Services provide 9 facilities across the city. 7 leisure centres offer a range of formal and informal sport/leisure activities including health and fitness suites, exercise classes, swimming (Learn to Swim programme), gymnastics, sports hall space for badminton, table tennis and community hire. A dedicated climbing facility and 3 full size 3g football pitches are operated by the Council. Gym access is available for those aged 11+. Humberstone Heights Golf Course and Saffron Lane Athletics Stadium exist in addition to the 7 centres.

Leicester has 32 outdoor gyms (ODG's) spanning the city. These are a valuable community asset providing free, accessible forms of exercise. A mixture of resistance and cardiovascular equipment is available in each location ranging from 6 pieces of equipment in Netherhall park to 18 pieces of equipment in Spinney Hill Park. Active Leicester provides a portfolio of outdoor sport and physical activity opportunities ranging from formal sport fixtures to a boating lake for leisure activities.

likeminded people. Types of sessions include walking sports, educational sessions on a wide range of health topics, sporting camps and match day opportunities.

4.1.6 PARK RUN

Free, weekly, 5km timed runs that are open to everyone, free, and are safe and easy to take part in. These events take place in pleasant parkland surroundings and encourage people of every ability to take part; from those taking their first steps in running to Olympians; from juniors to those with more experience; Park Run welcomes everyone. There are 2 Park Runs in Leicester city Victoria Park and Braunstone Park. There is currently 1 junior Park Run in the city at Aylestone recreation ground.

4.1.7 PARKS AND OPEN SPACES

180 parks and open spaces for recreational play including play parks, ball courts, football pitches, basketball courts, multi-use game areas (MUGA), table tennis tables, tennis courts, cricket wickets, football pitches, bowling greens and community orchards

Parks and open spaces assets include 240 play areas within parks, the 'Sports on Parks' programme provided by Active Leicester and 'Run, Walk, Jog' package that offers fixed assets including trails, routes, and information.

The parks, open spaces, community gardens and riverside corridor provide opportunities to participate in organised sport and fitness sessions along with space to enjoy informal recreational physical activity opportunities with friends and family.

4.2 ACTIVE TRAVEL OPPORTUNITIES

4.2.1 CYCLING IN LEICESTER

The city has undergone much transformation with many new cycle routes and paths established. There has also been an increase in the availability of secure cycle parking, cycle training and guided rides during the COVID-19 pandemic due to increased funding.

4.2.2 WALKING IN LEICESTER

There are many opportunities across Leicester to walk more including walking to school and health walks. Canal towpaths, historical walks and walking groups all provide opportunities.

4.2.3 CHOOSE HOW YOU MOVE

This website provides travel information for Leicester and Leicestershire, with a journey planner which allows residents and visitors to consider the different travel options available to them. The journey planner offers a variety of travel methods starting with the most active or sustainable travel options.

Link here: [A smarter way to travel for Leicester and Leicestershire > Choose How You Move](#)

4.3 ENVIRONMENT RELATED ASSETS

4.3.1 NEIGHBOURHOOD CENTRES AND LIBRARIES

There are 17 libraries, 16 community centres and five youth centres across Leicester providing access to resources, activities, learning, and room hire. Many local providers use these facilities for a variety of physical and social classes.

4.3.2 WORKPLACE HEALTH

There are many workplace initiatives that aim to reduce the amount of sitting people do through encouraging short breaks at regular intervals, taking the stairs instead of the lift and provision of standing desks.

Active Together (previously Leicestershire and Rutland Sport) support workplaces to improve their health and wellbeing through:

- Workplace Health Needs Assessment - a tested tool to help businesses identify key priority areas of health and wellbeing.
- Opportunities for workplaces to get involved in competitions and Business Games, as well as training and workshops.
- Activity Tracker track your sport and physical activity levels, link to popular tracking apps and create workplace 'challenges'.
- Exercise, health, and wellbeing 'top tips' to support you to lead a healthy lifestyle in and out of work.

Live Well Leicester undertakes a holistic assessment with clients referred from their GP or other health professional and some self-referrals. Subject to meeting the service specific referral criteria, the client will select which of the Lifestyle services to be referred to including weight management programmes, exercise on referral scheme, smoking cessation and others.

There is more information on lifestyle services in Leicester on the [Live Well website](#).

Making Every Contact Count is available currently within UHL and Leicestershire Partnership Trust (LPT) with a training programme developed and implemented for all staff. This offer is due to be extended to the Local Authority with training for social care and leisure services staff a priority.

There is currently a limited amount of support available from a consultant midwife for pregnant women who are very obese at the time of booking. However, there is a lack of support available for women who are overweight or moderately obese apart from general support and advice from midwives.

4.3.3 GENERAL PRACTICE (GPS), PHARMACIES, AND HEALTH CENTRES

There are 69 GP general practices in Leicester (including branch surgeries), of which 92% are within 15-minute walking distance. As of April 2023, there were around 426,000 patients registered to a GP in Leicester. Of health centres and pharmacies, there are 33 and 86 respectively.

4.3.4 WEIGHT MANAGEMENT SERVICES (ADULT)

Local authority public health teams have the responsibility for commissioning tier 1 and 2 weight management services. Integrated Care Boards (ICB's) have the responsibility for commissioning tier 3 (specialist weight management services) and tier 4 bariatric services.

The existing adult weight management services available in Leicester are outlined below.

Tier 1

- Leicester promotes and signposts to open access universal services and opportunities, particularly those offered through leisure centres, sports clubs, parks and green spaces and active travel.

Tier 2

- The services provided by Leicestershire Nutrition and Dietetics Service (LNDS) will end at the end of March 2024, therefore there will be no local tier 2 offer for Leicester residents.
- In 2021 the NHS launched a digital weight management programme to support adults living with obesity who have a diagnosis of diabetes, hypertension or both to manage their weight and improve their health. People can access the programme via a referral from their GP or pharmacist and receive a 12 week online behavioural and lifestyle programme accessed via a smartphone or computer with internet access.
- The national Healthier You NHS Diabetes Prevention Programme identifies people at risk of developing type 2 diabetes and refers them onto a nine-month, evidence-based lifestyle change programme. It is available both as a face-to-face group service and as a digital service. When referred into the programme, people are free to choose between the two. Access through GP referral.

Tier 3

- There is a tier 3 pilot operating from October 2023 for 2.5 years. This is provided by a number of partners including UHL, Leicester Diabetes Centre and LNDS. People with a BMI of over 35 and a co-morbidity or a BMI of 40 are eligible for the service, which provides a number of options for support. Referrals are through GP referral.

Tier 4

- Leicester, Leicestershire and Rutland ICB commission tier 4 bariatric surgery, however numbers of Leicester residents accessing bariatric surgery are low. Bariatric surgery is the option of choice (instead of lifestyle interventions or drug treatment) for adults with a BMI of more than 50 kg/m² when other interventions have not been effective.

4.4 ADDITIONAL SERVICES

4.4.1 LIVE WELL LEICESTER

Live Well Leicester undertakes a holistic assessment with clients referred from their General Practitioner (GP) or other health professional and some self-referrals. Subject to meeting the service specific referral criteria, the client will select which of the Lifestyle Services to be referred to including weight management programmes, exercise on referral scheme, smoking cessation, alcohol support services and others.

4.4.2 MAKING EVERY CONTACT COUNT (HEALTHY CONVERSATION SKILLS)

Making Every Contact Count is available to Local Authority, voluntary sector staff, University Hospitals Leicester (UHL) and Leicestershire Partnership Trust (LPT) staff. The training help individuals understand their role in behaviour change, the importance of prevention and what impact wider determinants have on health.

4.4.3 WIDER SERVICES

Additional services operate across the city which contribute towards health and wellbeing. These include themes around social isolation (Lets Get Together), mental health (Time to Change) and adventure playgrounds. Wider internal services including Neighbourhood and Environmental Services, Housing, Planning, Development, Transport, Adult Social Care and Childrens Social Care and Early Help all have themes of health and wellbeing throughout and provide opportunity for contact with clients. These include Children, Young People and Family Centres, assisted living support, class provision, contact with professionals and information.

5. PROJECTED SERVICES USE AND OUTCOMES IN 3-5 YEARS AND 5-10 YEARS

5.1 PROJECTIONS FOR 2030 AND 2040

The rising prevalence of obesity is a worldwide health concern because excess weight gain in populations leads to increased burden from a number of diseases, notably cardiovascular disease, diabetes and cancers. There are several research papers that look at projected levels of overweight and obesity in adults, with varying projections, but all do show an upward trajectory..⁴⁶

In the UK, past trends predict that between 2010 and 2030, the prevalence of obesity will rise from 26% to 41–48% in men, and from 26% to 35–43% in women. This equates to 11 million more obese adults by 2030, 3.3 million of whom would be older than 60. Obesity-related diseases are projected to add to health-care costs by £1.9–2bn a year in the UK by 2030.⁴⁷

As Leicester’s population grows and gets older, the overall number of obese adults is likely to increase. Crude estimates using current national obesity rates for each age group and applied to local population projections for 2030 and 2040 are presented in Table 1, below.

It is important to note that while these figures provide an estimate for excess weight in Leicester within the years to come, applying the national rates does not take into consideration the local characteristics of the population; Leicester is vastly different to the national profile with regards to its demographic breakdown. Findings should be interpreted with caution.

Table 1. Crude estimates for projected number of people with excess weight in Leicester, 2030 and 2040

Estimated excess weight prevalence by age band, 2021 figures		Estimated number of people	
		2030	2040
16-24	28%	20148	19422
25-34	59%	34183	38480
35-44	66%	29754	28802
45-54	73%	28079	28734
55-64	72%	24825	24925
65-74	74%	21380	21463
75+	69%	17013	21444
Total		175382	183269

Source: NHS Digital 2021 and ONS population projections 2018

Note: Whilst Table # shows population increases applied to the current national levels of excess weight, it doesn’t include any modelling of increasing trend of obesity.

6. UNMET NEEDS AND SERVICE GAPS

- There is very limited data available on underweight populations with surveillance of excess weight populations more heavily prioritised. This makes it hard to quantify the true prevalence of underweight within the population and its prevalence by demographics. Additionally, there is limited data on the health risks associated with underweight populations, including admissions and mortality directly or indirectly related to underweight populations.
- Some of the weight management and physical activity services provided are lacking in scale due to the increasing prevalence of overweight and obesity in Leicester and lack of available resource.
- There is a gap for people who require tier 3 specialist multidisciplinary teams, which is the responsibility of Integrated Care Boards.
- There is limited support for obese pregnant women to manage their weight.
- Limited training for health professionals regarding raising the issue of excess weight with their patients.
- Greater attention is needed within current lifestyle service provision to support at-risk groups such as BME communities, those with a disability and pregnant women and a better understanding of barriers and facilitators to utilising the many assets that Leicester City attains.
- Recent CMO Guidelines suggest that regular physical activity and healthy eating is beneficial for individuals with a disability. There is an opportunity to increase the amount of and access to disability sport and healthy lifestyle provision across the city.
- There is a lack of suitable, structured provision for families to exercise together and learn to eat and cook well, whilst parks and open spaces are available for informal family friendly activity our leisure centres and sports clubs often offer adult and child physical activity sessions separately.
- Whilst there is a vast array of physical activity opportunities across the city, often there is little uptake of facilities. More support and encouragement for local people to access formal and informal physical activity and healthy eating opportunities is required. A focus on encouraging people to increase their activity through informal activities such as walking, cycling and gardening may increase the number of Leicester residents who meet the CMO physical activity guidelines of 150 minutes per week. Small manageable changes to lifestyle can often be the catalyst for long term behaviour change.
- There is a need for increased food knowledge, skills and access to nutritional and sustainable food across the city. Prioritise connecting communities through the sharing of skills and knowledge about food growing and cooking and celebrate the diversity of food across Leicester.
- Improved procurement amongst public organisations and businesses is needed to encourage them to provide and serve food that improves the health and wellbeing of communities, the environment and the local food and farming economy.
- There is a need to encourage and support the adoption of sustainable diets to improve health and environment.

7. RECOMMENDATIONS FOR CONSIDERATION BY COMMISSIONERS

The recommendations below should be considered by commissioners and service providers relating to healthy weight and wider.

7.1 APPROACH RECOMMENDATIONS

- Implement a whole systems approach to healthy weight that builds upon existing policy and utilises the strengths and assets within the system.
- Ensure that the narrative around healthy weight remains compassionate, free from bias and is not discriminatory.
- Focus on environmental influences on healthy weight and collaborate with local partners to remove the blame from individuals experiencing excess weight and create an environment more conducive to healthier choices.

7.2 SERVICE PROVISION RECOMMENDATIONS

- Ensure that existing weight management service pathways are clear to health professionals and public.
- Ensure that existing weight management services are appropriate for local population need, considering accessibility and inclusivity based on diversity, disability, and literacy levels.
- Provide specific support that is tailored for pregnant women with maternal obesity.
- Ensure that Tier 1 weight management services provide clear, consistent messaging around nutrition and movement, in a way that is relevant to the population of Leicester.
- Explore the impact of low income on families access to good food and movement.
- Provide clearer access and better promotion of local services, assets and infrastructure to local residents that can support healthy weight through good nutrition and movement.
- Focus provision of services relating to weight management on areas and population groups with higher experience of excess weight.
- Clarify and improve use of existing services and pathways outside of weight management for the promotion of healthy weight and healthy living including social care, children's centres, housing and wider local services.
- Promote the participation of informal physical activity across the city such as active travel, walking, cycling and gardening and ensure that social prescribers are aware of local opportunities to access such opportunities.
- Encourage joining up of services such as mental health, social isolation, weight management, and physical activity to pool resources and promote healthy weight in a holistic way.

- Support the local health care sector to ensure that physical environments, food offers, staff training and awareness of the impact of excess weight is embedded across primary and secondary care.

7.3 STAFF TRAINING RECOMMENDATIONS

- Ensure that health professionals, and non-health professionals are trained to discuss healthy living, raise the issue of excess weight and be aware of appropriate local services.
- Continue to extend the reach of Making Every Contact Count+ (Healthy Conversation Skills) offer across Leicester.

8. KEY CONTACTS:

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Amy Hathway, Project Manager for the Whole Systems Approach to Obesity,
Amy.Hathway@leicester.gov.uk

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