
National Child Measurement Programme (NCMP)

Leicester
2021/22 school year

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National Child Measurement Programme

The NCMP was launched in the 2005/06 academic year and collects annual measurements of the height and weight of over one million children in Reception (age 4-5 years) and Year 6 (age 10-11 years) in mainstream state-maintained schools in every local authority in England.* Based on their measurements, children are then allocated to a weight category.

Parents receive feedback on their child's weight status along with the offer of further advice and support on achieving a healthy weight for their child. For children with excess weight, the NCMP data enables local areas to plan services to tackle child obesity and monitor progress.

This report contains analyses of the 2021/22 data showing Body Mass Index (BMI) classification rates with breakdowns by: child age and sex; local authority and region; levels of deprivation; as well as comparisons with other local authorities and England.

Comparisons between groups and over time have been statistically tested to determine whether differences are likely to be genuine (i.e. statistically significant) or the result of random natural variation. Only statistically significant differences have been described with terms such as "higher", "lower", "increase" or "decrease".

NCMP Data is a National Statistic



National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is NHS Digital's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

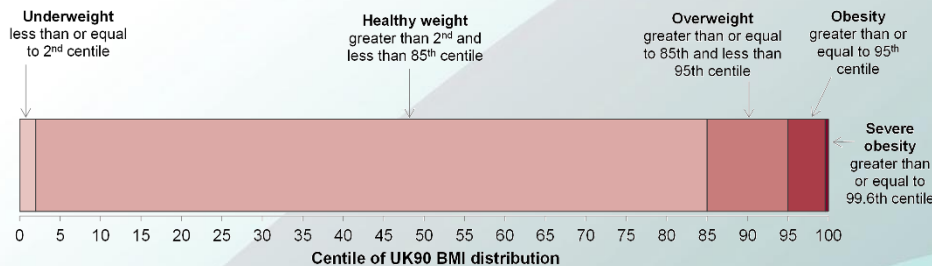
Find out more about the Code of Practice for Official Statistics at:

www.statisticsauthority.gov.uk/assessment/code-of-practice.

Technical information

Body Mass Index is calculated by dividing a child's weight in kilograms by their height in meters squared (kg/m^2).

The BMI classification of each child is derived by calculating the child's BMI centile and classifying as shown in the diagram below. This calculation uses age and sex as well as height and weight to take into account different growth patterns in boys and girls at different ages.



The NCMP uses the British 1990 growth reference (UK90) to define the BMI classifications. This approach is recommended by The National Institute for Health and Care Excellence (NICE).

The prevalence of children in a BMI classification is calculated by dividing the number of children in that BMI classification by the total number of children and multiplying the result by 100.

Geographical analyses in this report are all based on the postcode of the child's home address which is mapped to a lower super output area.

Note: The BMI classification “Severely obese” is a subset of “Obese”; children with a BMI centile of between 95 and 100 are classified as “Obese” and those with a BMI centile of between 99.6 and 100 are classified as “Severely obese”

Key facts for Leicester children

Year



In Reception, around 1 in 5 (21.4%) were classified as overweight or obese. In England overall, this was 22%.

Both boys and girls in Reception are significantly more likely to be underweight, compared to their England peers.

Boys in Reception are significantly less likely to be overweight compared to their England peers.

Reception year Asian children were significantly more likely to be underweight while White British children were significantly more likely to be overweight and obese, compared to their England peers.



Time series data shows overweight and obesity has remained relatively stable over the past decade in Reception year children.

Year



In Year 6, around 2 in 5 (40.8%) were classified as overweight or obese, which is significantly higher than for England overall which was 37.8%.

Both boys and girls in Year 6 are significantly more likely to be underweight or obese (including severely obese), and significantly less likely to be of a healthy weight, compared to their England peers.

Year 6 boys were significantly more likely to be obese than girls.

Year 6 Asian children were significantly more likely to be underweight while White British children were significantly more likely to be overweight and obese. Children of Mixed ethnicity were significantly more likely to be obese.

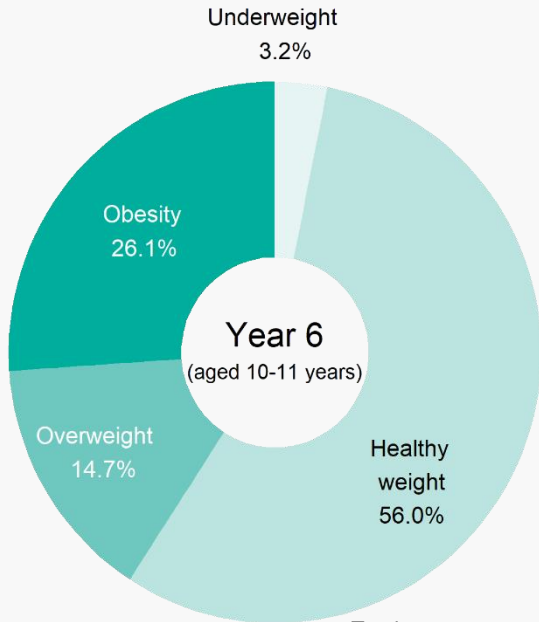
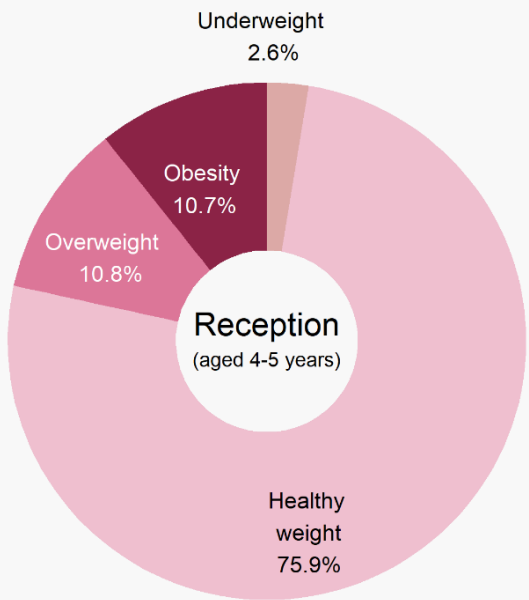


Time series data shows overweight and obesity has been on an upward trend over the past decade in Year 6 children.

BMI status of children by age in Leicester

National Child Measurement Programme 2021 to 2022

Year 6 have a higher prevalence of underweight, overweight and obese children, and lower prevalence of healthy weight, than Reception year. Prevalence of obesity in Year 6 children is 2.4 times higher than in Reception year.



Totals may not sum due to rounding

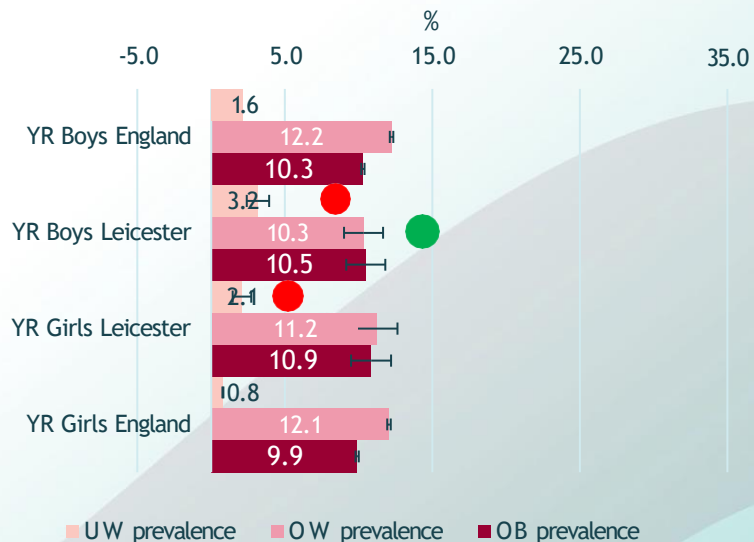
BMI status of children by sex in Leicester and England

National Child Measurement Programme 2021 to 2022

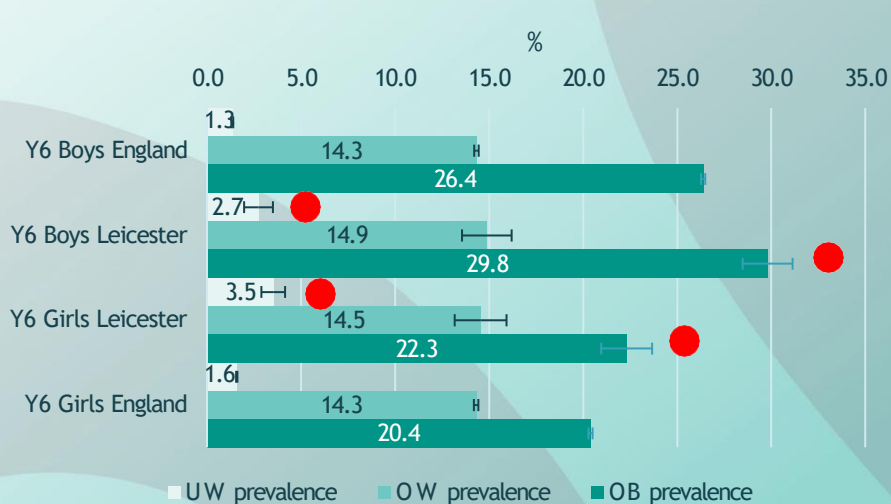
In Reception year, similar proportions of boys and girls are underweight, overweight and obese in Leicester. Both boys and girls in Reception are significantly more likely to be underweight, and also boys are significantly less likely to be overweight in boys, than their England peers.

In Year 6, similar proportions of boys and girls in Leicester are underweight and overweight, but boys are significantly more likely to be obese. Both boys and girls in Year 6 are significantly more likely to be underweight and obese, than their England peers.

Reception: prevalence of underweight, overweight and obesity 2021/22



Year 6: prevalence of underweight, overweight and obesity 2021/22



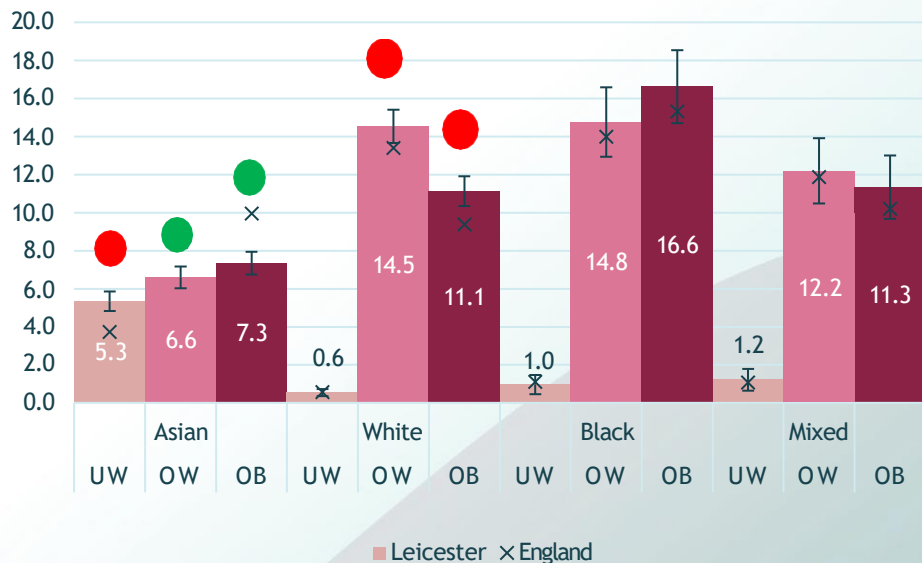
Sig. higher than England ●

Sig. lower than England ●

BMI status by ethnicity: prevalence by broad ethnic group in Leicester and England

National Child Measurement Programme

Reception year BMI categories by ethnic group in Leicester, 2017/18 to 2019/20 and 2021/22



In Reception year, children of Asian ethnicity were significantly more likely to be underweight, and were significantly less likely to be overweight and obese, when compared to their England peers.*

Children of White ethnicity were significantly more likely to be overweight and obese compared to their England peers.

There were no significant differences between Leicester and England for Reception children of Black or Mixed ethnicity.

**England Peers refers to children within the same ethnic group*

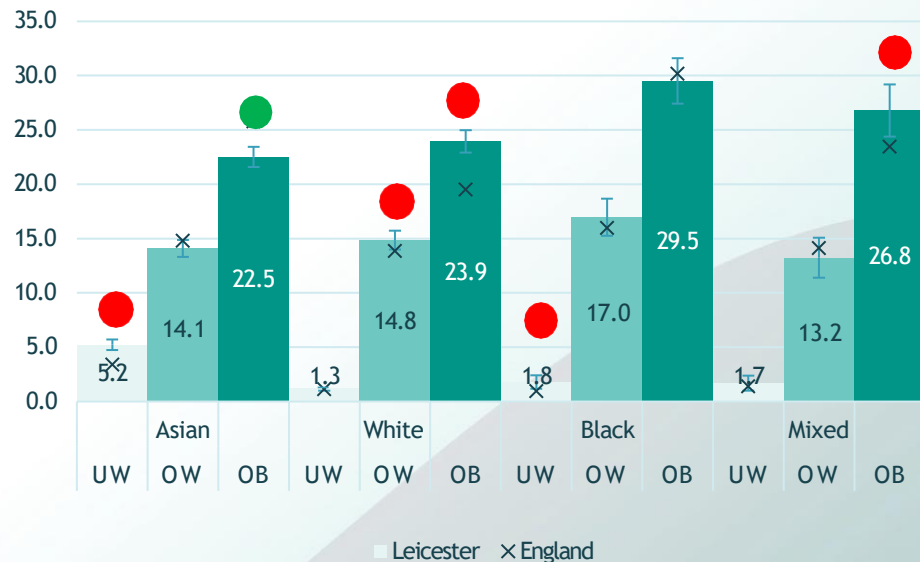
Note: BMI has been found to underestimate body fat in South Asian children both in Reception and Year 6. Leicester has a large South Asian population which may partly explain why underweight prevalence is higher in the city.¹

Underweight	Overweight	Obese	England ethnic average 	Sig. higher than England within ethnic group 	Sig. lower than England within ethnic group
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BMI status by ethnicity: prevalence by broad ethnic group in Leicester and England

National Child Measurement Programme

Year 6 BMI categories by ethnic group in Leicester, 2017/18 to 2019/20 and 2021/22



In Year 6, children of Asian ethnicity were significantly more likely to be underweight, and significantly less likely to be obese, when compared to England peers.*

Children of White ethnicity were significantly more likely to be overweight and obese compared to England peers.

Children of mixed ethnicity were significantly more likely to be obese compared to England peers.

There were no significant differences between Leicester and England for Year 6 children of Black ethnicity.

*England Peers refers to children within the same ethnic group

Note: BMI has been found to underestimate body fat in South Asian children both in Reception and Year 6. Leicester has a large South Asian population which may partly explain why underweight prevalence is higher in the city.¹

Underweight

Overweight

Obese

England ethnic average



Sig. higher than England within ethnic group



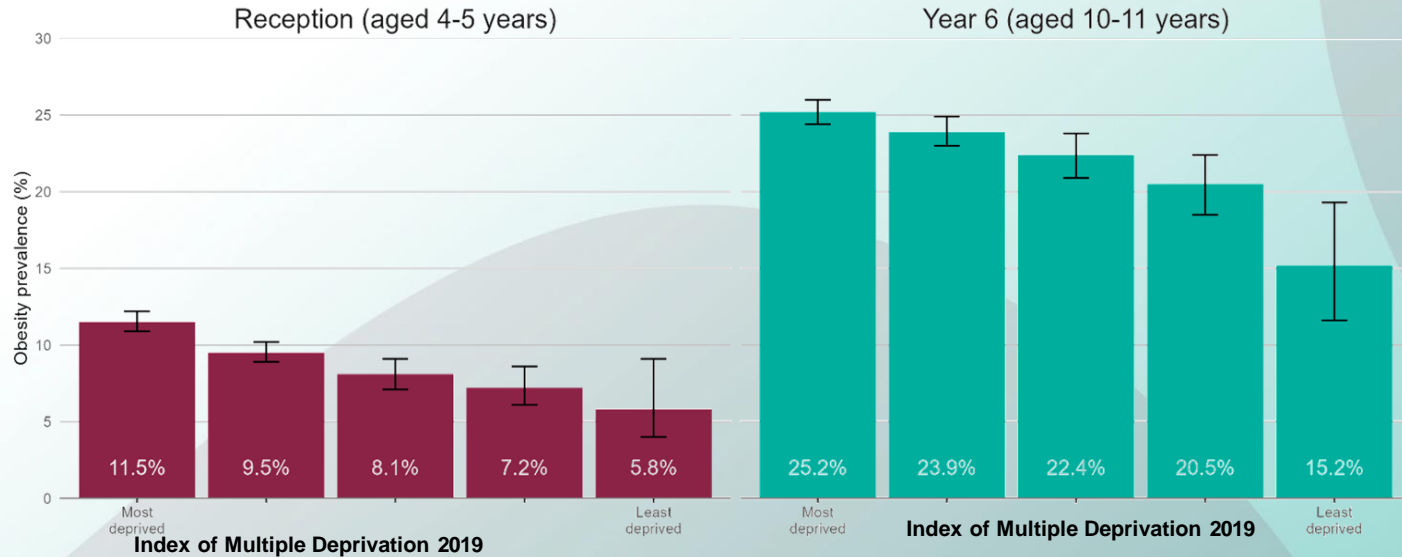
Sig. worse than England within ethnic group



BMI status by deprivation: Obesity prevalence by deprivation in Leicester

National Child Measurement Programme

A clear gradient can be seen between deprivation and obesity for both Reception year and Year 6 children, with those in the more deprived quintiles reporting *higher* obesity rates, and those in the least deprived quintiles reporting *lower* obesity rates.



Data combined 5-years, (2016 to 2017, 2017 to 2018, 2018 to 2019, 2019 to 2020, and 2021 to 2022), see note on slide 16
95% confidence intervals are displayed on the chart

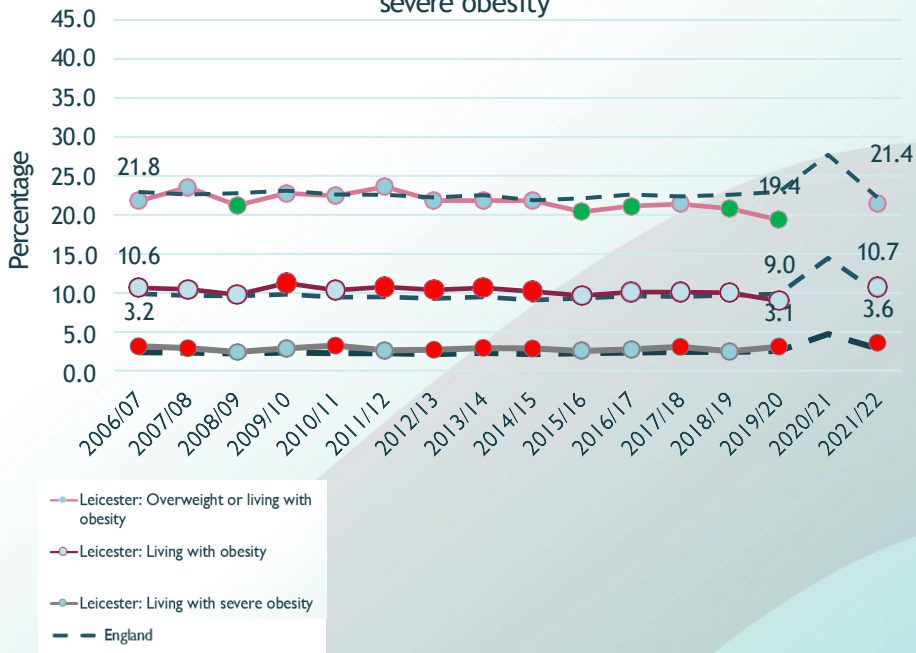
Trend: prevalence of overweight and obesity (including severe obesity)

National Child Measurement Programme 2006/2007 to 2021/2022

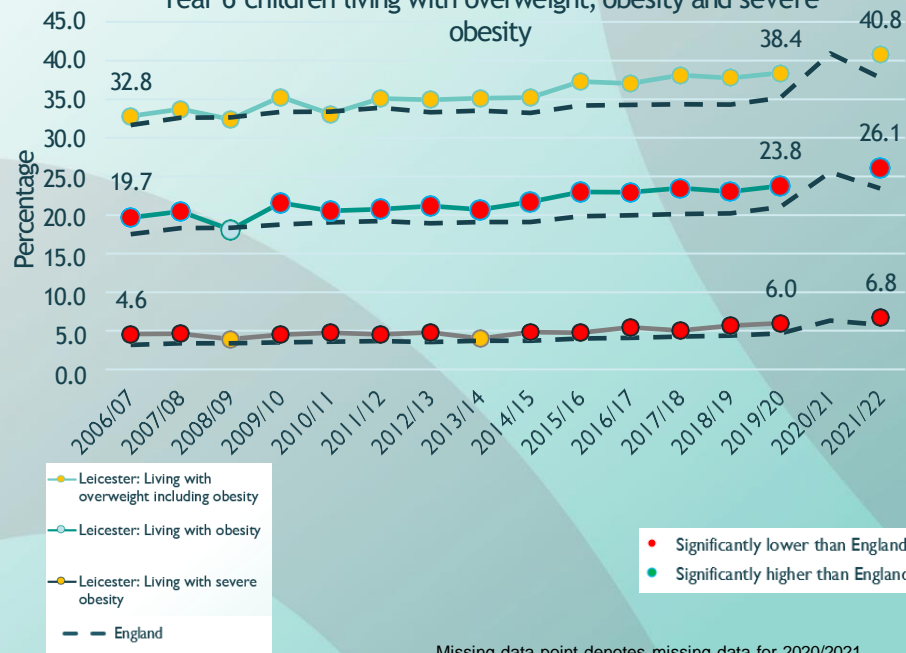
In Reception, the prevalence of overweight, obese and severely obese children has remained relatively unchanged over the past decade. The proportion of children who are severely obese remains significantly higher than England overall.

In Year 6, the prevalence of overweight, obese and severely obese children has steadily increased over the past decade. Prevalence of overweight and obese children has had the greatest increase from 2019/20. The proportion of children who are obese and severely obese remains significantly higher than England overall.

Reception year children living with overweight, obesity and severe obesity



Year 6 children living with overweight, obesity and severe obesity



Note: for Year 6, comparisons are not possible with the first years of the NCMP (2006/2007 to 2008/2009) as low participation levels led to underestimation of obesity prevalence

Missing data point denotes missing data for 2020/2021

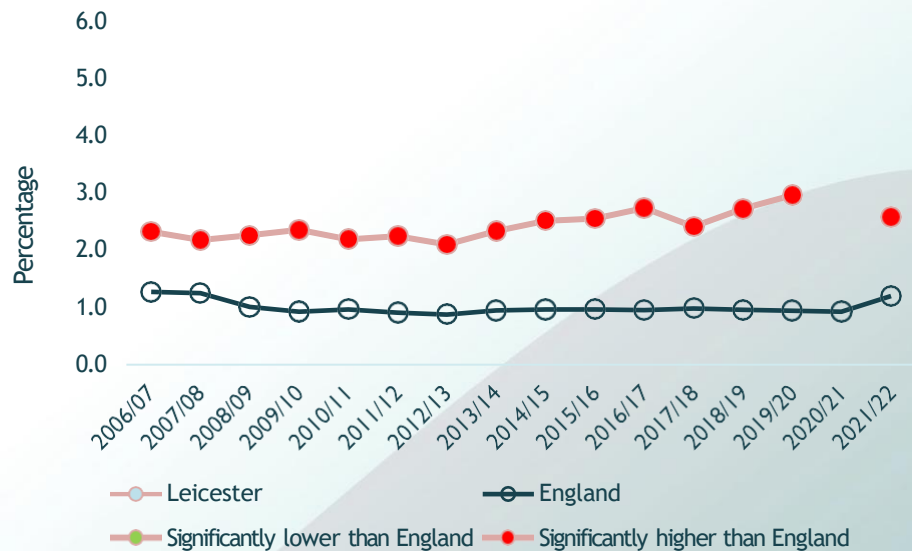
Trend in the prevalence of underweight in Leicester

National Child Measurement Programme 2006/2007 to 2021/2022

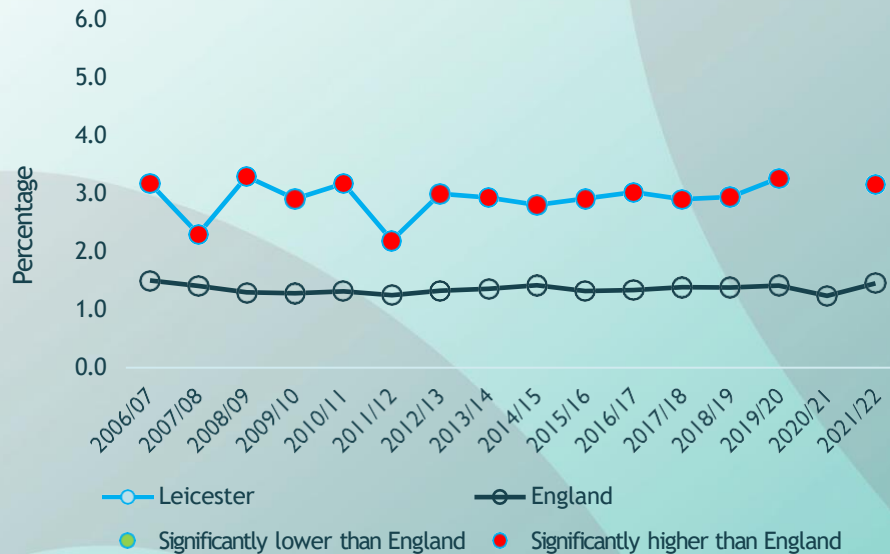
In Reception, the prevalence of underweight children has marginally increased over the past decade. Underweight prevalence remains significantly higher than England.

In Year 6, the prevalence of underweight children has remained relatively unchanged over the past decade. Underweight prevalence remains significantly higher than England.

Reception: Prevalence of underweight



Year 6: Prevalence of underweight



Missing data point denotes missing data for 2020/2021 13

Note: for Year 6, comparisons are not possible with the first years of the NCMP (2006/2007 to 2008/2009) as low participation levels led to underestimation of obesity prevalence

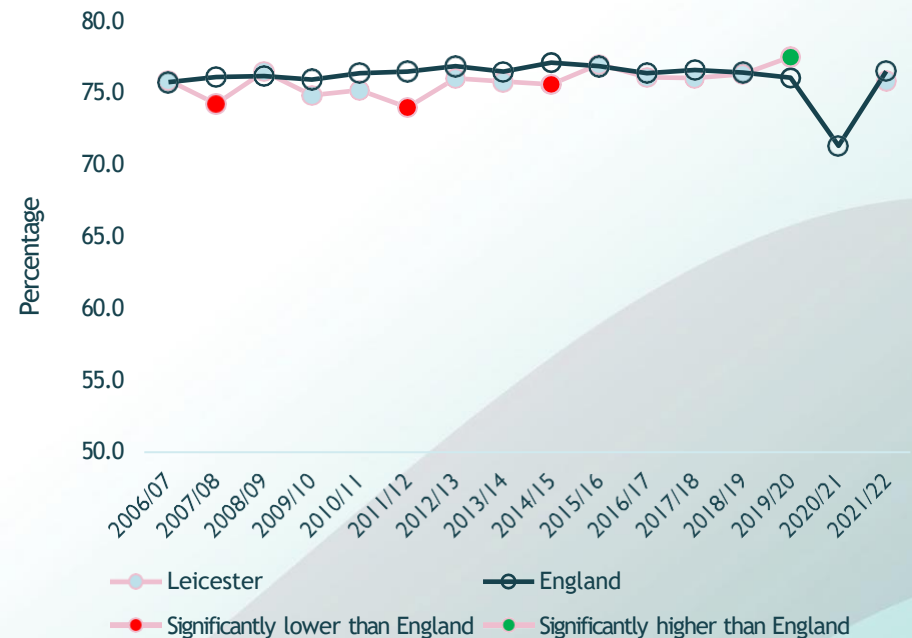
Trend in the prevalence of healthy weight in Leicester

National Child Measurement Programme 2006/2007 to 2021/2022

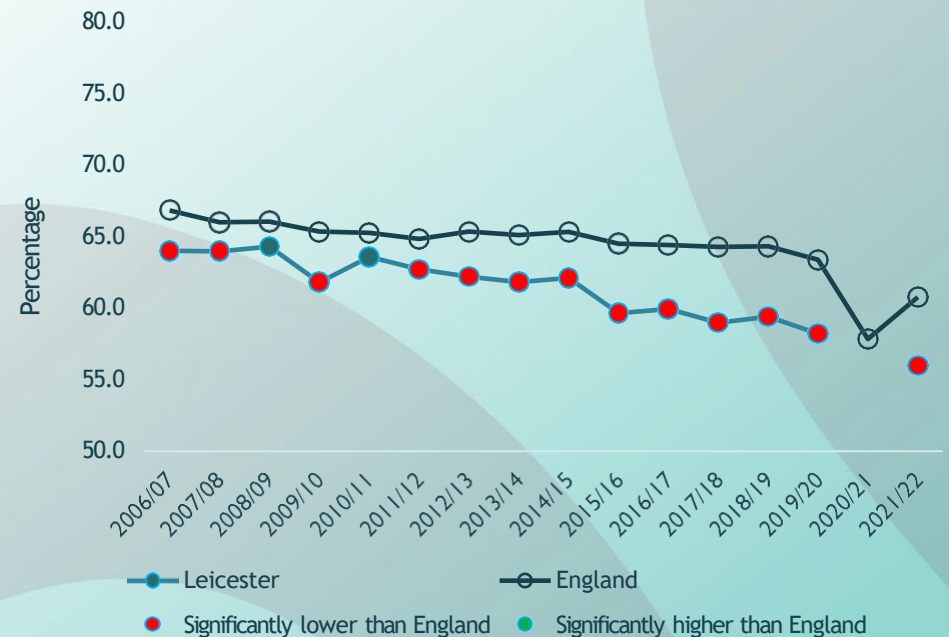
In Reception year, the prevalence of healthy weight children in Leicester has been both higher and lower than the national average. In 2021/22 the proportion of Reception year children who are of a healthy weight is not significantly different to England overall.

In Year 6, the prevalence of healthy weight children has decreased over the past decade, and remains significantly lower than for England overall.

Reception: Prevalence of healthy weight



Year 6: Prevalence of healthy weight



Missing data point denotes missing data for 2020/2021

Note: for Year 6, comparisons are not possible with the first years of the NCMP (2006/2007 to 2008/2009) as low participation levels led to underestimation of obesity prevalence

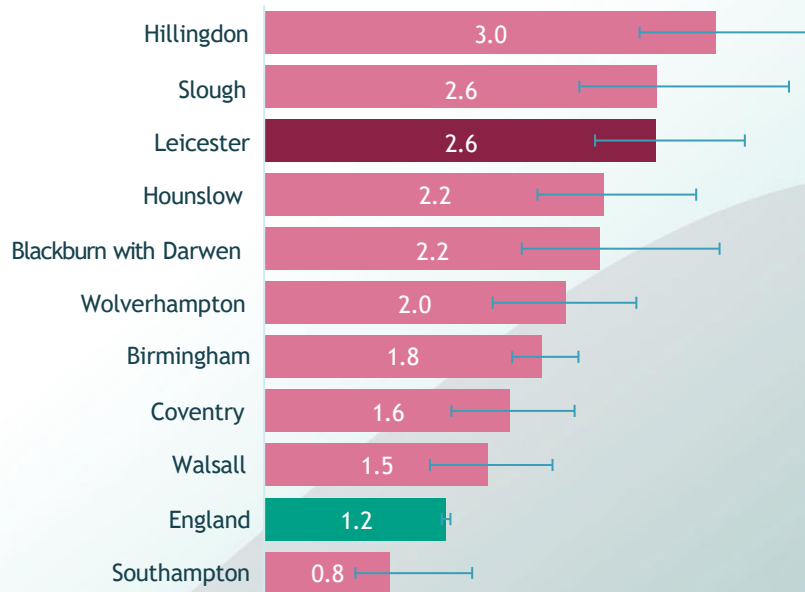
DfE comparators: prevalence of **underweight** in Leicester

National Child Measurement Programme 2006/2007 to 2021/2022

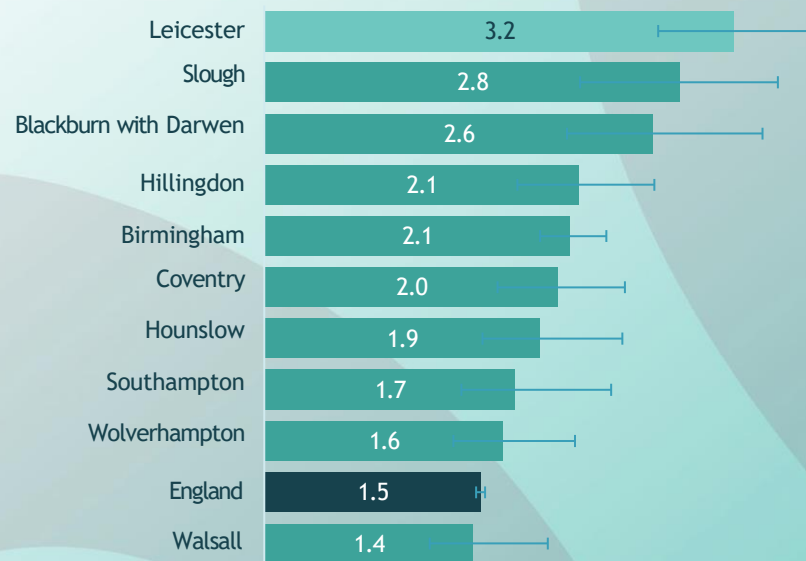
In Reception year, Leicester has the 3rd highest prevalence of underweight children when compared to its 10 DfE comparators.

In Year 6, Leicester has the highest prevalence of underweight children when compared to its 10 DfE comparators.

Reception: Prevalence of underweight in Leicester and peer areas, 2021/22



Year 6: Prevalence of underweight in Leicester and peer areas, 2021/22



Note: for Year 6, comparisons are not possible with the first years of the NCMP (2006/2007 to 2008/2009) as low participation levels led to underestimation of obesity prevalence

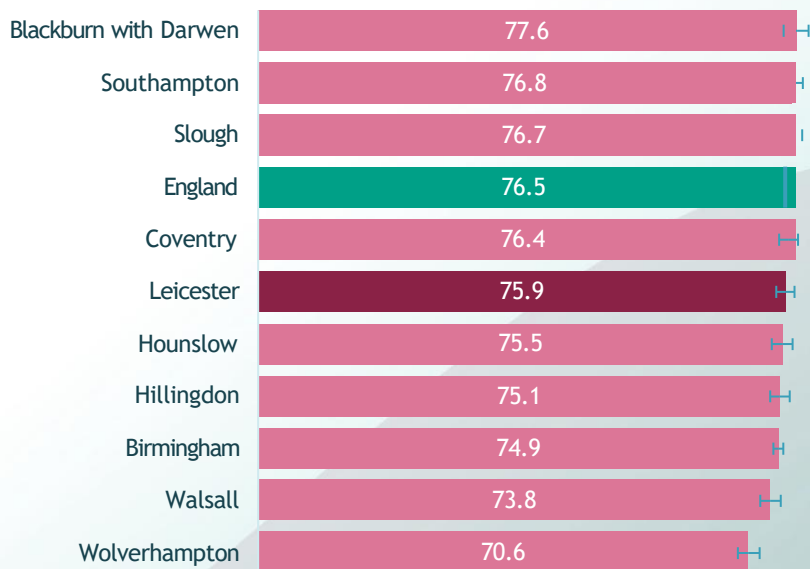
DfE comparators: prevalence of healthy weight in Leicester

National Child Measurement Programme 2006/2007 to 2021/2022

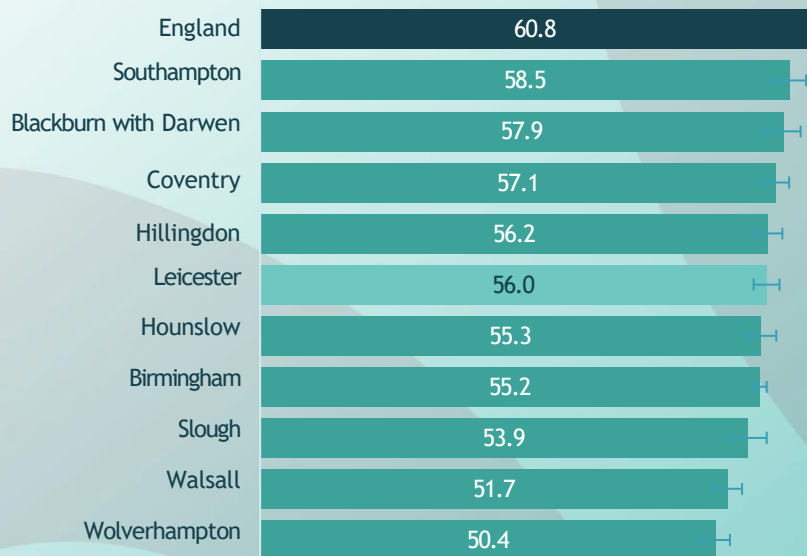
In Reception year, Leicester has the 5th highest prevalence of healthy weight compared to its 10 DfE comparators.

In Year 6, Leicester has the 5th highest prevalence of healthy weight compared to its 10 DfE comparators. All comparators, including Leicester, have significantly lower prevalence compared to England overall.

Reception: Prevalence of healthy weight in Leicester and peer areas, 2021/22



Year 6: Prevalence of healthy weight in Leicester and peer areas, 2021/22



Note: for Year 6, comparisons are not possible with the first years of the NCMP (2006/2007 to 2008/2009) as low participation levels led to underestimation of obesity prevalence

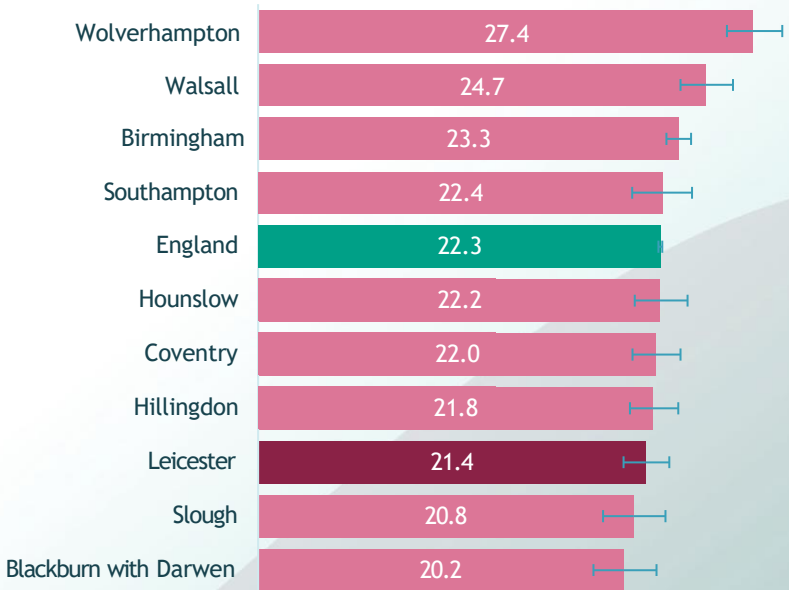
DfE comparators: prevalence of overweight (including obesity) in Leicester

National Child Measurement Programme 2006/2007 to 2021/2022

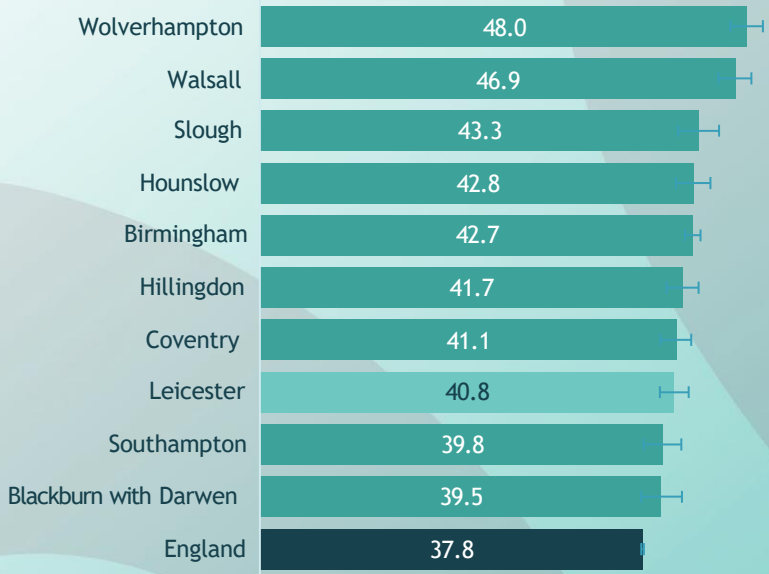
In Reception year, Leicester has the 3rd lowest prevalence of overweight (including obese) children compared to its 10 DfE comparators.

In Year 6, Leicester has the 3rd lowest prevalence of overweight (including obese) children compared to its 10 DfE comparators.

Reception: Prevalence of overweight (including obesity) in Leicester and peer areas, 2021/22



Year 6: Prevalence of overweight (including obesity) in Leicester and peer areas, 2021/22



Note: for Year 6, comparisons are not possible with the first years of the NCMP (2006/2007 to 2008/2009) as low participation levels led to underestimation of obesity prevalence

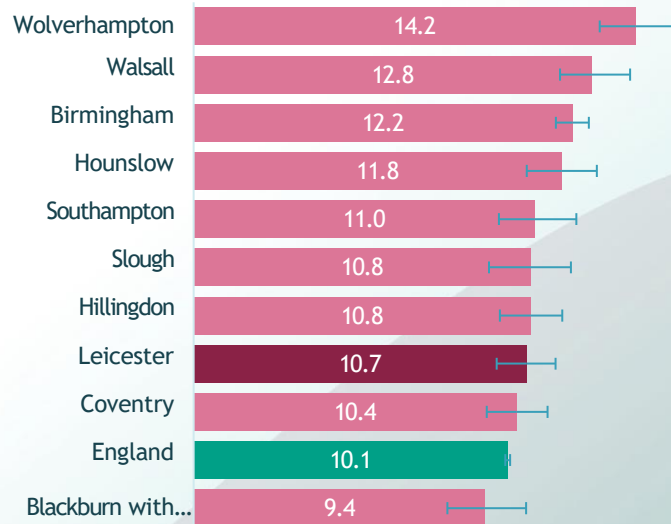
DfE comparators: prevalence of obesity (including severe obesity) in Leicester

National Child Measurement Programme 2006/2007 to 2021/2022

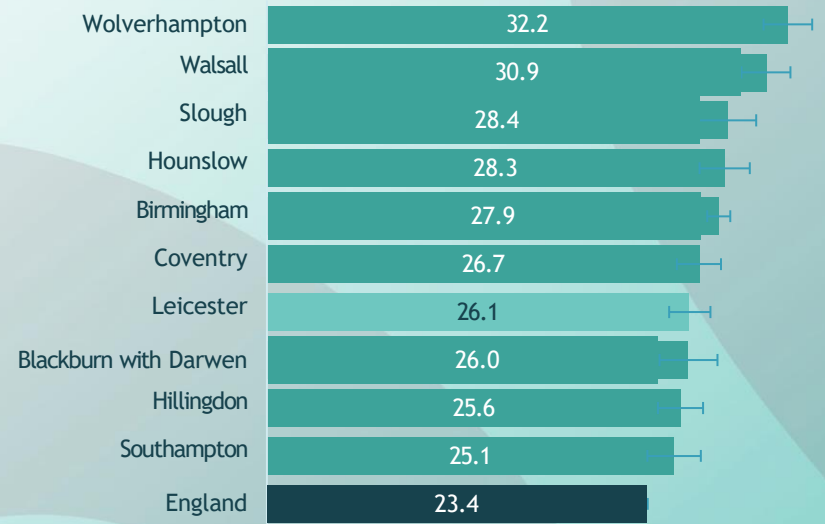
In Reception year, Leicester has the 3rd lowest prevalence of obesity (including severe) compared to its 10 DfE comparators.

In Year 6, Leicester has the 4th lowest prevalence of obesity (including severe) compared to its 10 DfE comparators. All comparators, except Southampton have significantly higher prevalence than for England overall.

Reception: Prevalence of obesity (including severe obesity) in Leicester and peer areas, 2021/22



Year 6: Prevalence of obesity (including severe obesity) in Leicester and peer areas, 2021/22

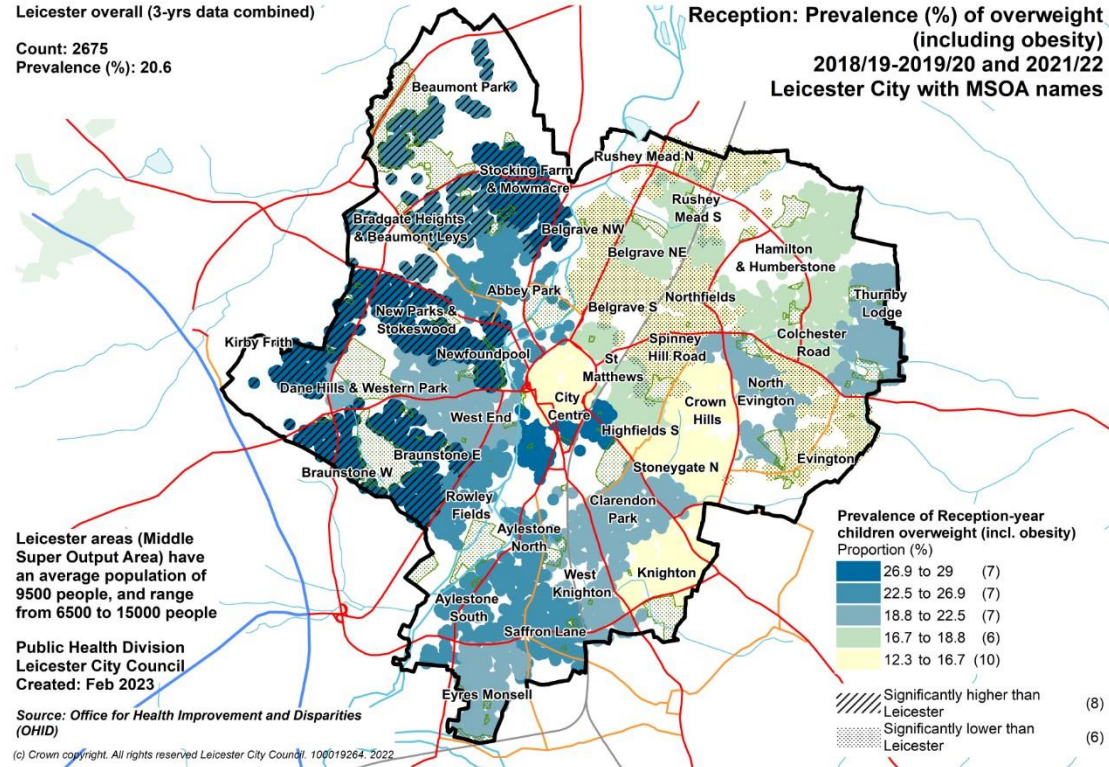


Note: for Year 6, comparisons are not possible with the first years of the NCMP (2006/2007 to 2008/2009) as low participation levels led to underestimation of obesity prevalence

Overweight and obese prevalence – Reception

In Reception year, children in the west of the city were more likely to be overweight or obese. Braunstone Park East (29%), Kirby Frith (29%) and Braunstone Park West (29%) had the highest combined overweight and obesity prevalence.

Children in 6 of Leicester's 37 MSOAs were significantly less likely to be overweight or obese compared to Leicester overall. This included Spinney Hill Road (12%), Rushey Mead North (13%), Belgrave South (13%), Evington (13%), Belgrave North West (14%) and Northfields & Merrydale (17%).

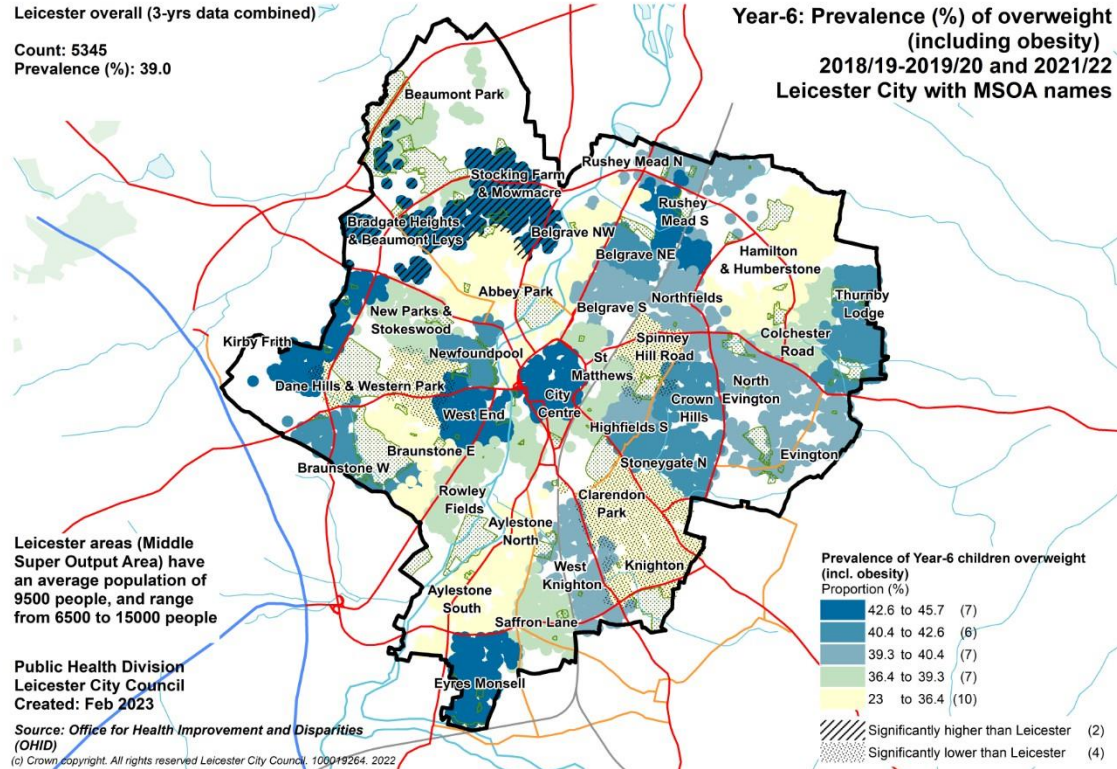


A Middle Super Output Area (MSOA) is a with a population of around 8500 people. MSOAs in Leicester have been given informal names. Three-year averages have been used to avoid suppression of data when dealing with small areas.

Overweight and obesity prevalence – Year 6

In Year 6, children in the North West and South of the city were more likely to be overweight or obese. Stocking Farm & Mowmacre (46%), Bradgate Heights & Beaumont Leys (46%) had the highest combined overweight and obesity prevalence.

Children in 4 of Leicester's 37 MSOAs were significantly less likely to be overweight or obese compared to Leicester overall. This included Knighton (23%), Clarendon Park & Stoneygate South, (28%) Dane Hills & Western Park (29%), and Spinney Hill Road (33%).

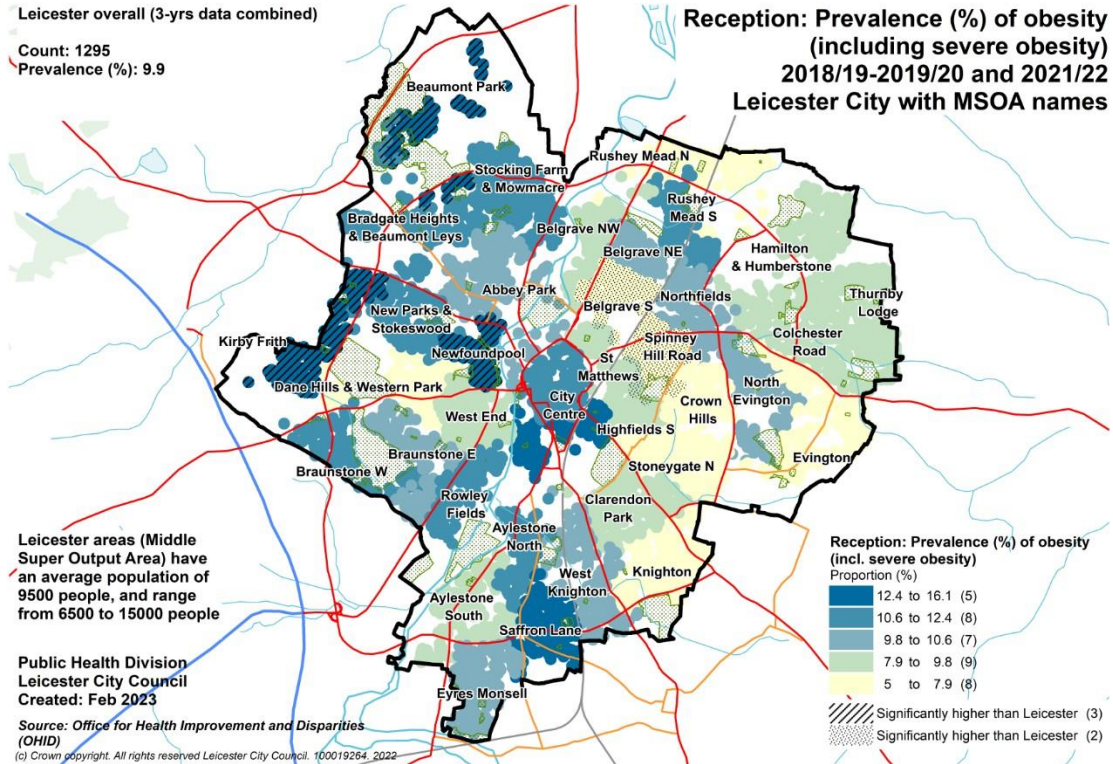


A Middle Super Output Area (MSOA) is with a population of around 8500 people. MSOAs in Leicester have been given informal names. Three-year averages have been used to avoid suppression of data when dealing with small areas.

Obesity and severe obesity – Reception

In Reception year, children in the West of the city were more likely to be obese or severely obese. Beaumont Park (16%), Newfoundpool (15%), and Kirby Frith (13%) had the highest combined obese and severely obese prevalence.

Children in 2 of Leicester's 37 MSOAs were significantly less likely to be overweight or obese compared to Leicester overall. This included Belgrave South (6%) and Spinney Hill Road (7%).

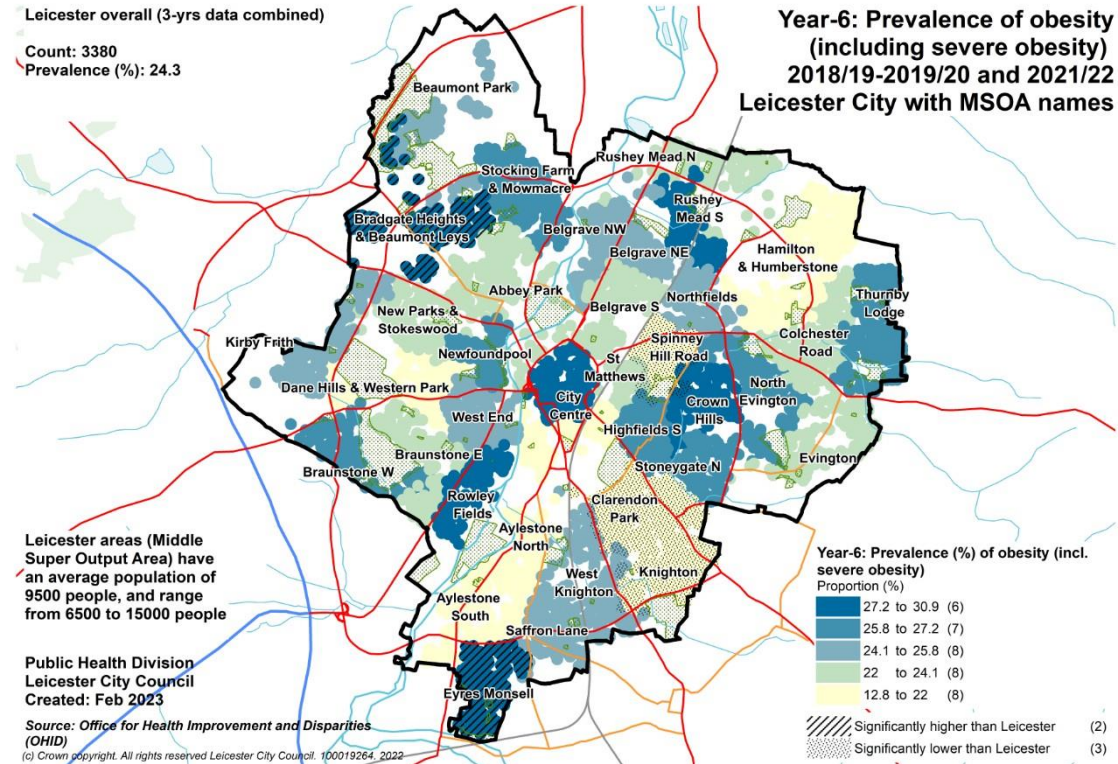


A Middle Super Output Area (MSOA) is a with a population of around 8500 people. MSOAs in Leicester have been given informal names. Three-year averages have been used to avoid suppression of data when dealing with small areas.

Obesity and severe obesity – Year 6

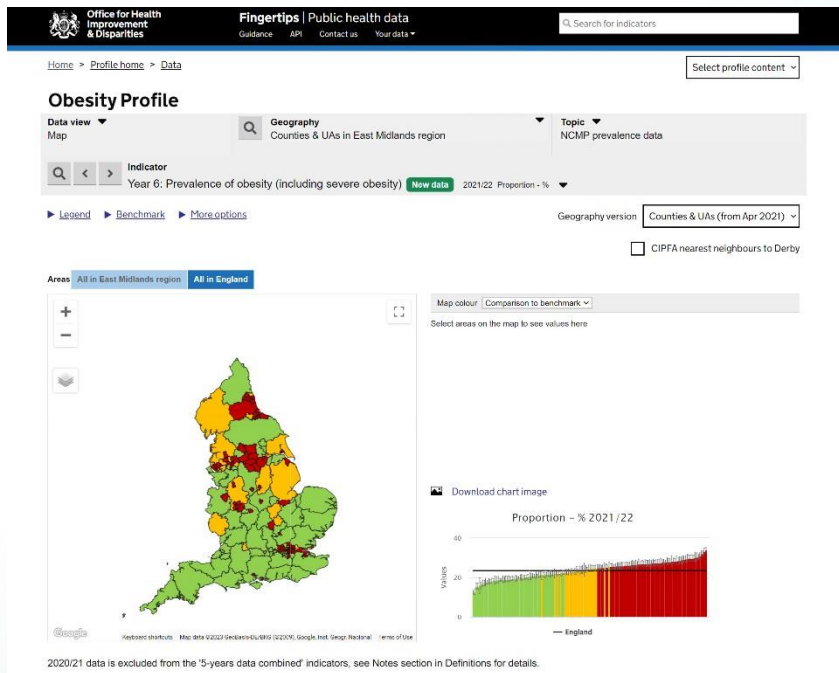
In Year 6, children in Eyres Monsell (31%) and Bradgate Heights & Beaumont Leys (29%) had the highest combined obese and severe obese prevalence.

Children in 3 of Leicester's 37 MSOAs were significantly less likely to be obese or severely obese compared to Leicester overall. Spinney Hill Road (19%), Clarendon Park & Stoneygate South (15%), Knighton (13%) had the lowest combined obese and severe obese prevalence.



A Middle Super Output Area (MSOA) is a with a population of around 8500 people. MSOAs in Leicester have been given informal names. Three-year averages have been used to avoid suppression of data when dealing with small areas.

For more information: Obesity Profile on Fingertips



Screenshot of webpage

The Obesity Profile on Fingertips displays data from the National Child Measurement Programme.

Indicators on the prevalence of underweight, healthy weight overweight, obesity, and severe obesity are shown for England, regions, upper and lower tier local authorities, Integrated Care Boards, electoral wards, and middle super output areas.

Inequalities data is also displayed showing differences in prevalence by sex, ethnic group, and deprivation.

<http://fingertips.phe.org.uk/profile/national-child-measurement-programme>

Impact of the COVID-19 pandemic on NCMP data collection

The 2019 to 2020 NCMP data collection stopped in March 2020 when schools were closed due to the COVID-19 pandemic. The number of children measured was around 75% of previous years. Despite the lower than usual number of measurements, analysis by NHS Digital confirms that figures at national and regional level are directly comparable to previous and future years. The data at local authority level and below is not as robust. As a result, a small number of areas do not have published data for 2019 to 2020 and data for some areas has a reliability flag indicating that figures need to be interpreted with caution. Further information is available to download [from the Obesity Profile on Fingertips](#).

The 2020 to 2021 NCMP had a delayed start due to the COVID-19 pandemic. Local authorities were still able to collect enough data to enable the production of national and regional estimates of prevalence by body mass index (BMI) category. Around 300,000 children (25% of previous full measurement years) were measured but the sample was not fully representative of the child population. Therefore weighting was used in the analysis to produce valid estimates of prevalence that could be compared to data from previous and future years. Further information on the 2020 to 2021 data collection and weighting methods is available [in the NHS Digital report](#). [Due to the](#) smaller number of children measured in 2020 to 2021, we cannot be sure the data is robust when broken down further to local authority level. Therefore local authority data for 2020 to 2021 is only published in instances where 75% or more of the expected number of children were measured. No data from 2020 to 2021 is included in the three and five year grouped data analysis.

NCMP methodology note

Describing an area as similar, better or worse

For the data in this slide pack a local authority value is described as similar, higher or lower based on statistically significant differences from the England value. Statistical comparisons are undertaken by comparing the confidence intervals of a local authority value to see if they overlap with the England value, with non-overlapping confidence intervals being considered as statistically significantly different. Where the England value lies within the confidence interval of a local authority it is described as similar. The yellow, green and red dots are used to indicate where Leicester is not significantly different to, significantly better and significantly worse, than the England average, respectively.

Data quality issues for three and five year grouped data

In the three and five year grouped NCMP data, for ward level and local authority inequalities data, we would expect around 33% and 20% respectively of data from each contributing year. Data points are flagged if less than 20% (for 3-year data) or less than 10% (for 5-year data) of data is from 2019 to 2020. The data is still considered to be reliable even with a small amount of data from 2019 to 2020. Further information on the contribution of 2019 to 2020 data to three and five year combined data is available [from the Obesity Profile](#). [As only a small number of](#) areas collected robust data in 2020 to 2021, no data from 2020 to 2021 is included in the three and five year grouped data analysis.