



# National Child Measurement Programme

England, 2015/16 school year

Information and technology for better health and care

3 November 2016

### **Key findings**

- Over a fifth of reception children were overweight or obese. In year 6 it was over a third.
- The prevalence of obesity has increased since 2014/15 in both reception and year 6.
- In reception it increased to 9.3% from 9.1%, and in year 6 to 19.8% from 19.1%.
- In reception obesity prevalence was lower than in 2006/07. In year 6 obesity prevalence was higher than in 2006/07 but the early years of the NCMP are known to be an underestimate for obesity prevalence for this older year group<sup>1</sup>.
- Obesity prevalence was higher for boys than girls in both age groups.
- Obesity prevalence for children living in the most deprived areas in both age groups was more than double that of those living in the least deprived areas.
- The deprivation gap as measured by the differences in obesity prevalence between the most and least deprived areas has increased over time.
- Obesity prevalence varied by local authority. For reception this ranged from 5.1 per cent in Richmond upon Thames to 14.7 per cent in Middlesbrough.
- In year 6 the range was from 11.0 per cent in Richmond upon Thames, to 28.5 per cent in Barking and Dagenham.

Source: NCMP 2015/16, NHS Digital

1. It is likely that year 6 obesity prevalence in the first years of the NCMP (2006/07 to 2008/09) were underestimates due to low participation. This, and the impact of other improvements in data quality, should be considered when making comparisons over time. More details in annex B.

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### Introduction

The National Child Measurement Programme (NCMP) annually measures over one million children and provides robust data on rates of childhood obesity.

The programme was launched in the 2005/06 academic year and now holds ten years of reliable data<sup>1</sup>.

Height and weight measurements are collected from children in reception (aged 4–5 years) and year 6 (aged 10–11 years) primarily in statemaintained schools<sup>2</sup> in England.

This report contains analyses of the 2015/16 data showing Body Mass Index (BMI) classification rates with breakdowns by: child age and sex; local authority and region; levels of deprivation; urban/rural classification; ethnicity and ONS area classification. The report also contains comparisons over time where appropriate. 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".

The report is accompanied by:

- Data tables, including 95 per cent confidence intervals which should be considered when interpreting results.
- Technical appendices with information on data collection, validation, confidence intervals, statistical testing and the methodology used for BMI classification rates.

- 1. 2006/07 is the first year that the data are considered to be robust due to the low participation in 2005/06.
- 2. Any data collected from independent or special schools is excluded from this analysis. See "Coverage" in appendix B for more details.

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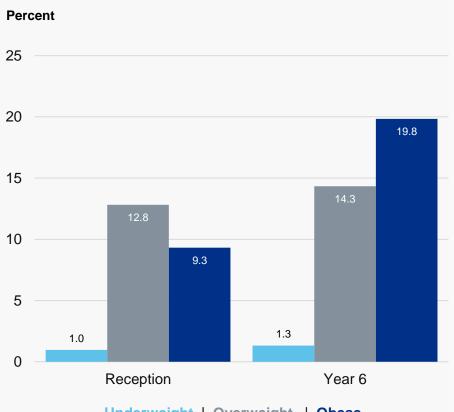


### Age

Obesity prevalence was more than twice as high in year 6 (19.8%) compared to reception (9.3%).

Over a fifth of reception children were overweight or obese. In year 6 it was over a third.

The proportion of underweight children was higher in year 6 (1.3%) than in reception (1.0%).



Underweight | Overweight | Obese

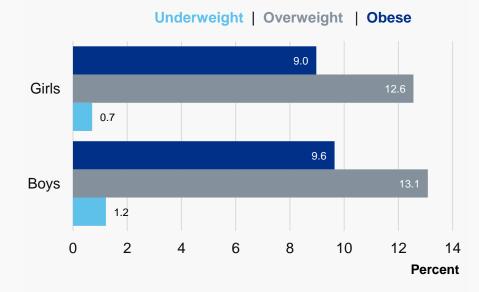
### Source: NCMP 2015/16, table 1a, NHS Digital

The proportion of children in the healthy weight category is not shown as it would lengthen the scale making the differences for the other categories harder to see. Please see table 1a for the proportion of children in the healthy weight category.

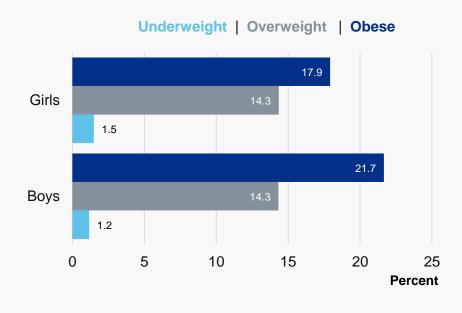


The difference in obesity prevalence between boys and girls was larger in year 6 than reception. Underweight prevalence was higher for boys in reception but higher for girls in year 6.

Year 6



Reception



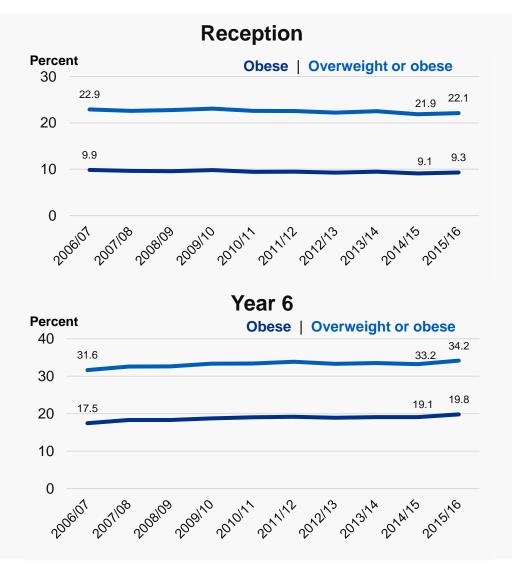
### Age over time

The prevalence of obesity has increased since 2014/15 in both age groups.

In reception it increased to 9.3% from 9.1%, and in year 6 to 19.8% from 19.1%.

In reception obesity prevalence was lower than in 2006/07.

In year 6 obesity prevalence was higher than in 2006/07<sup>1</sup>.



### Source: NCMP 2015/16, table 1b, NHS Digital

1. It is likely that year 6 obesity prevalence in the first years of the NCMP (2006/07 to 2008/09) were underestimates due to low participation. This, and the impact of other improvements in data quality, should be considered when making comparisons over time. More details in annex B.



### Source: NCMP 2015/16, table 4, NHS Digital

Reception

Year 6



30 20 3.5 Asian or Asian British 9.6 1.0 Black or Black British 15.2 1.0 Chinese 7.3 1.0 Any Other Ethnic Group 11.2 1.1 White 18.1 1.2 Mixed 22.2 3.5 Asian or Asian British 24.5 1.0 Black or Black British 28.6 1.8 Chinese 17.2 1.4 Any Other Ethnic Group 25.6

Percent

Underweight | Obese

Obesity prevalence was highest for Black or Black British children in both school years.

It was lowest for Chinese children in reception.

The Asian or Asian British group had the highest prevalence of underweight children at 3.5% in both school years.

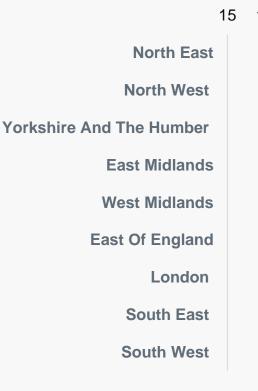


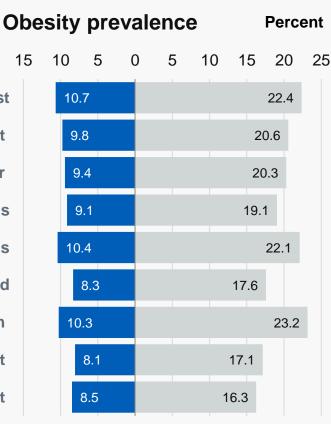
## Region

Obesity prevalence was highest in the North East, West Midlands and London.

It was lowest in the East of England, South East and South West.

London had the highest prevalence of underweight children in reception.

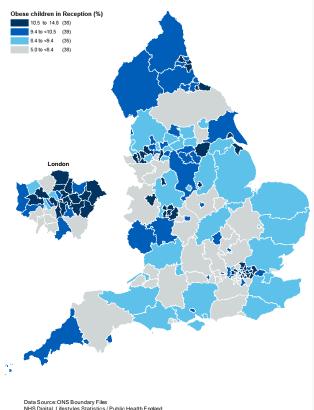




**Reception** | Year 6

### Local authority

### Reception



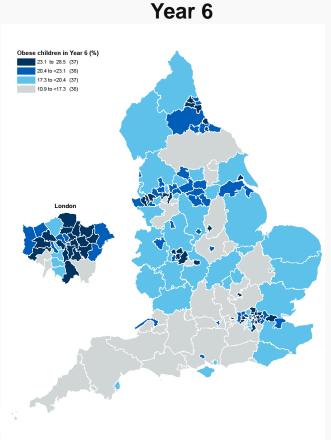
NHS Digital, Lifestyles Statistics / Public Health England

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Obesity prevalence varied by local authority.

For reception this ranged from 5.1 per cent in Richmond upon Thames to 14.7 per cent in Middlesbrough.

In year 6 the range was from 11.0 per cent in Richmond upon Thames, to 28.5 per cent in Barking and Dagenham.



### Data Source:ONS Boundary Files NHS Digital, Lifestyles Statistics / Public Health England

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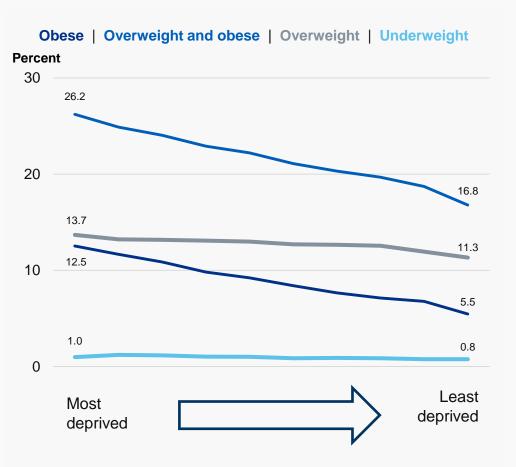


### **Deprivation - Reception**

As in previous years there was a strong relationship between deprivation and obesity in both age groups.

Obesity prevalence ranged from 12.5% of children living in the most deprived areas to 5.5% in the least deprived areas<sup>1</sup>.

In general underweight prevalence decreases as deprivation decreases.

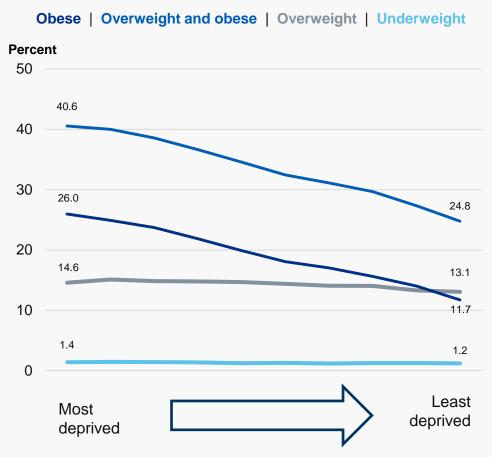


### **Deprivation – Year 6**

26.0% of children living in the most deprived areas were obese compared to 11.7% in the least deprived areas<sup>1</sup>.

Combined overweight and obesity prevalence ranged from 40.6% in the most deprived areas to 24.8% in the least deprived areas.

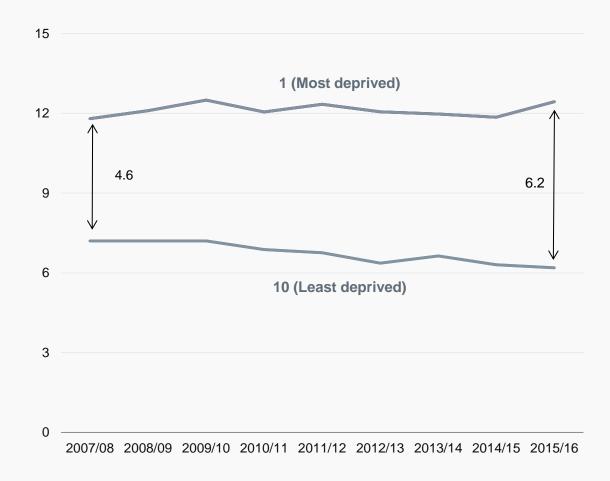
In the least deprived areas obesity prevalence was lower than overweight prevalence.



## **Deprivation Gap - Reception**

In reception, the gap between obesity prevalence for the most and least deprived areas<sup>1</sup> has increased over time.

It was 6.2 percentage points in 2015/16 compared to 4.6 percentage points in 2007/08.



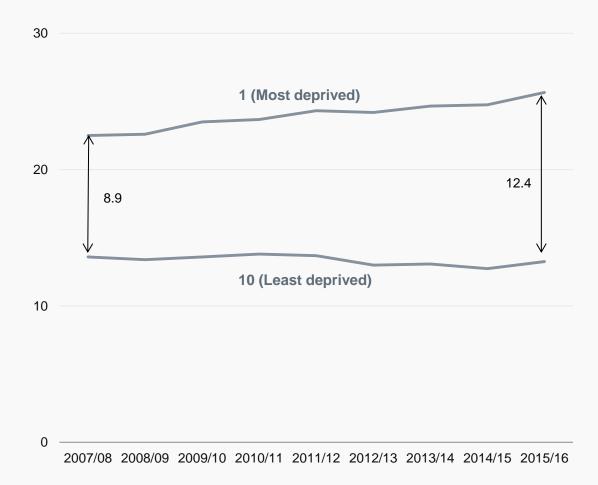
Source: NCMP 2015/16, table 6b (deprivation decile based on postcode of the school), NHS Digital.

1. As defined by deprivation decile . Deprivation is based on postcode of the school in this chart as postcode of the child was of poor quality in 18 the early years of the NCMP.

## **Deprivation Gap – Year 6**

In year 6, the gap between obesity prevalence for the most and least deprived areas<sup>1</sup> has increased over time.

It was 12.4 percentage points in 2015/16 compared to 8.9 percentage points in 2007/08.



Source: NCMP 2015/16, table 6b (deprivation based on postcode of the school), NHS Digital.

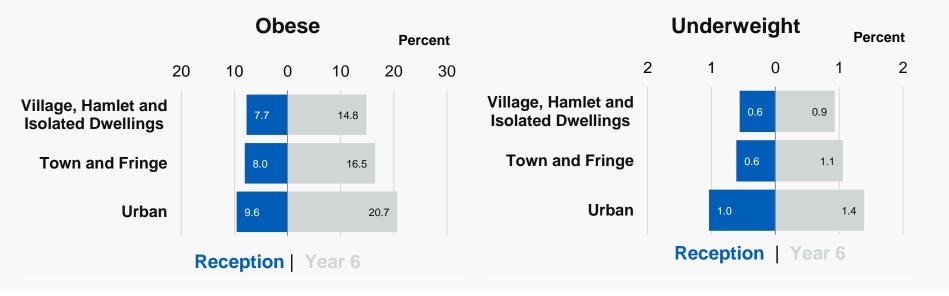
1. As defined by deprivation decile. Deprivation is based on postcode of the school in this chart as postcode of the child was of poor quality in 19 the early years of the NCMP.



### **Rurality**

Obesity prevalence in urban areas was highest in both age groups – 9.6% in reception and 20.7% in year 6.

Underweight prevalence was also highest in urban areas



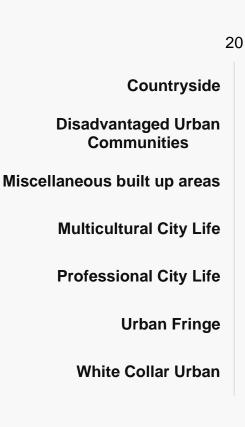
Source: NCMP 2015/16, table 5a (based on postcode of the child), NHS Digital

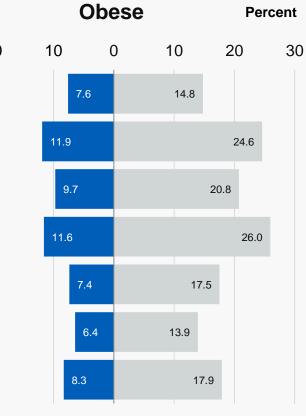
### **ONS Area Classification**

### **ONS Area Classification**

Obesity prevalence for children in reception was highest in disadvantaged urban communities, but was higher in multicultural city life areas for year 6.

Obesity was least prevalent in urban fringe areas for both age groups.





**Reception** Year 6

### **Additional Resources**

The PHE Obesity Knowledge & Information team (formerly the National Obesity Observatory) conduct additional analyses on the NCMP data, including regional and local analyses, and produce a range of reports and tools which are available at:

https://www.noo.org.uk/NCMP/National\_report http://www.noo.org.uk/visualisation http://fingertips.phe.org.uk/profile/national-child-measurementprogramme. Published 3 November 2016 by NHS Digital, part of the Government Statistical Service.

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