

Child Obesity

Doncaster picture

National Child Measurement Programme

- The National Child Measurement Programme (NCMP) measures the height and weight of children in reception class (aged 4 to 5 years) and year 6 (aged 10 to 11 years) to assess overweight and obesity levels in children within primary schools. This data can be used at a national level to support local public health initiatives and inform the local planning and delivery of services for children.
- The programme is recognised internationally as a world-class source of public health intelligence and holds UK National Statistics status.
- The NCMP was set up in line with the Government's strategy to tackle obesity and to:
 - inform local planning and delivery of services for children
 - gather population-level data to allow analysis of trends in growth patterns and obesity
 - increase public and professional understanding of weight issues in children and be a vehicle for engaging with children and families about healthy lifestyles and weight issues.

Measurement

- Adults (aged 18 years and above) of all ages are usually classified as obese if their BMI exceeds 30kg/m^2 , or overweight if their BMI is greater than 25kg/m^2 . Individuals with a BMI of less than 18.5kg/m^2 are usually considered underweight.
- Assessing the BMI of children is more complicated than for adults because a child's BMI changes as they mature. Growth patterns differ between boys and girls, so both the age and sex of a child needs to be taken into account when estimating whether BMI is too high or too low.
- Because the relationship between a child's BMI and the level of fatness changes over time, fixed thresholds such as those used for adults should not be applied to children as they would provide misleading findings.

Child BMI

- Instead of using fixed BMI thresholds to classify individuals (as used for adults) children's BMI is categorised using variable thresholds that take into account the child's age and sex.
- These thresholds are usually derived from a reference population, known as a child growth reference. They are calculated by weighing and measuring a large sample of children to identify how BMI varies by age and sex across the population. As well as showing the pattern of growth, these data also provide an average BMI for a boy or girl at a particular age, and the distribution of measurements above and below this value. This means that individual children can be compared to the reference population and the degree of variation from an expected value can be calculated.

Latest data

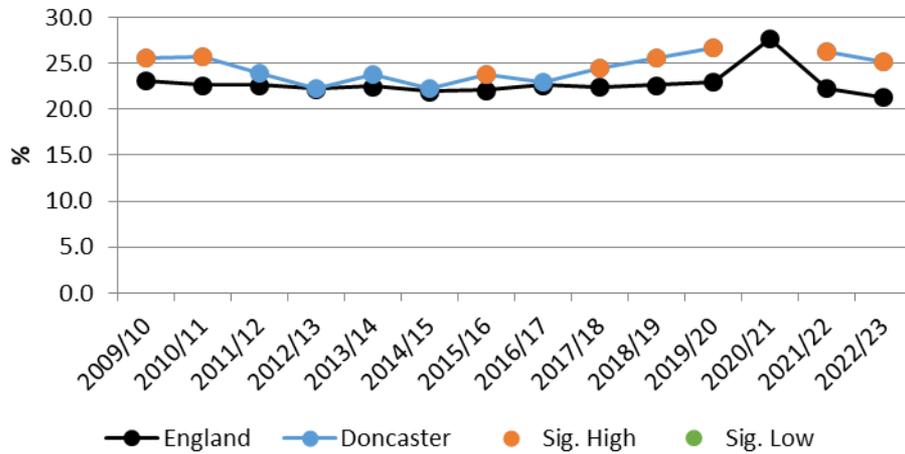
2022/23	Reception	Year 6
Underweight (%)	0.7	1.3
Healthy Weight (%)	74.3	57.8
Overweight (%)	13.8	13.1
Very Overweight (%)	11.2	27.8
Overweight & Very Overweight (%)	25.0	40.9

2021/22	Reception	Year 6
Underweight (%)	0.7	1.3
Healthy Weight (%)	73.1	57.9
Overweight (%)	13.3	13.4
Very Overweight (%)	12.9	27.4
Overweight & Very Overweight (%)	26.2	40.8

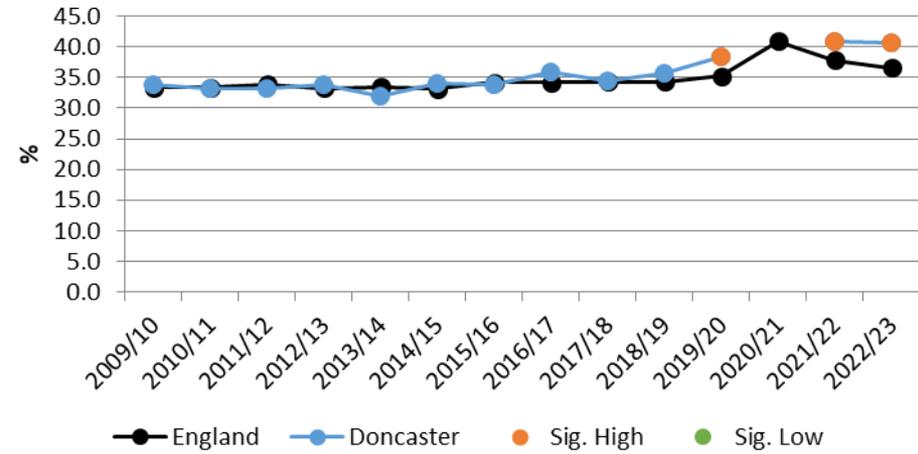
- The latest NCMP data for 2022/23 are now available for Doncaster (national data are not available yet).
- Around 1 in 4 children in Reception are overweight or obese
- Over a third of year 6 children are overweight or obese

Current trends

Overweight & Obese in Reception

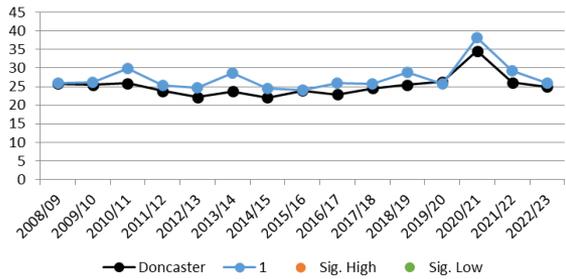
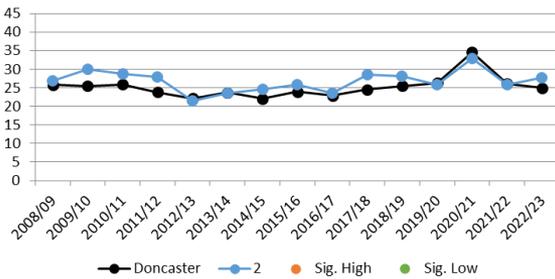
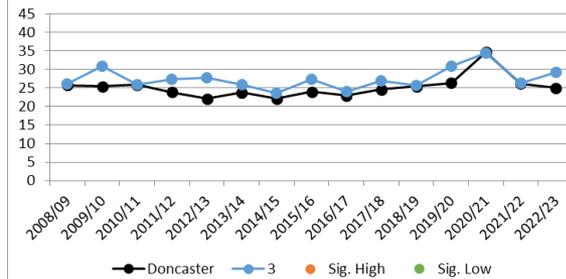
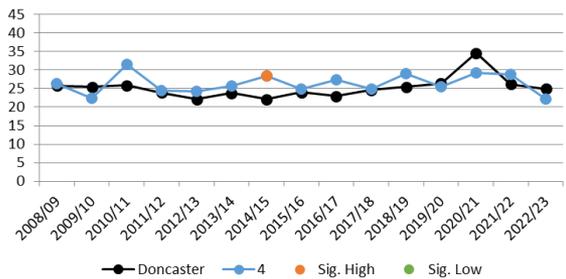
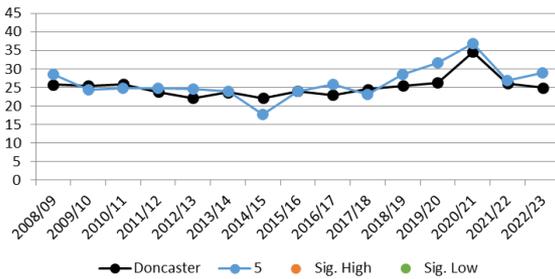
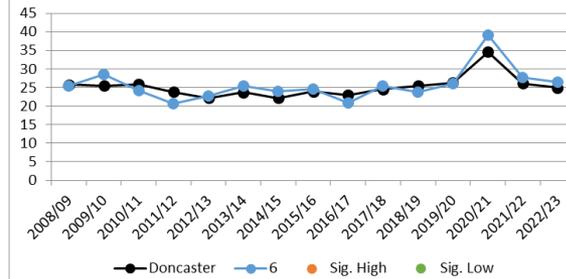
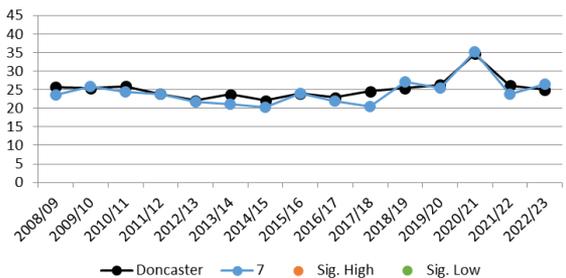
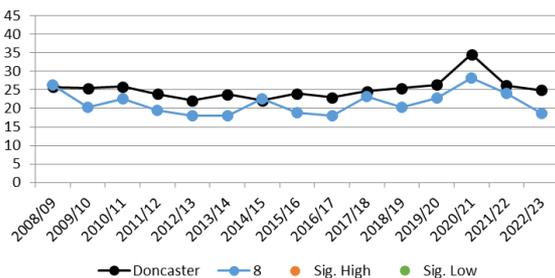
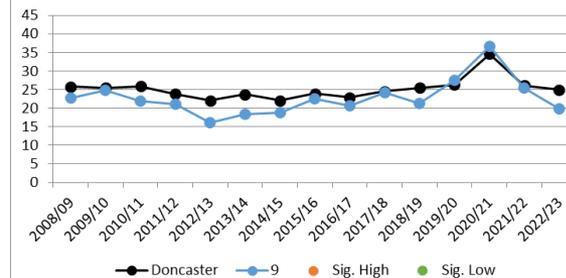
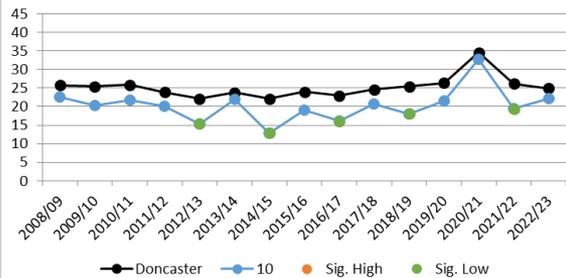


Overweight & Obese in Year 6



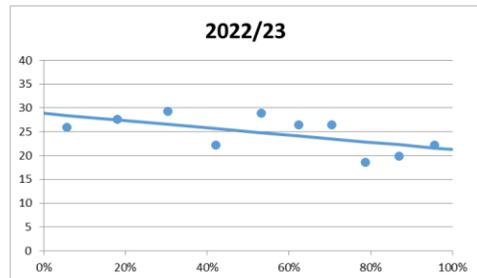
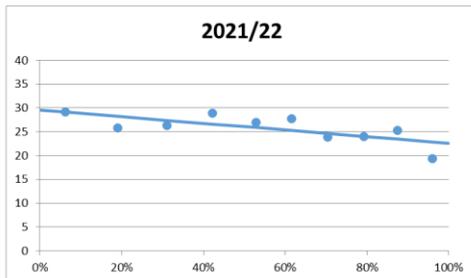
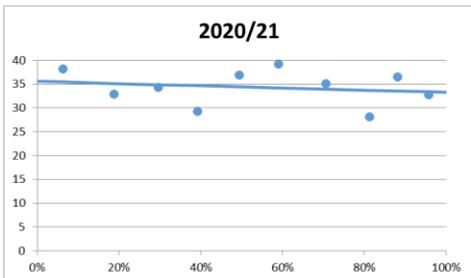
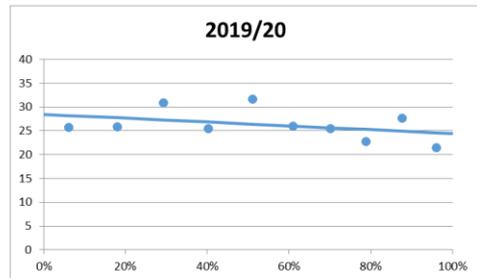
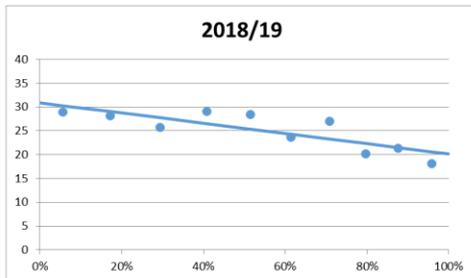
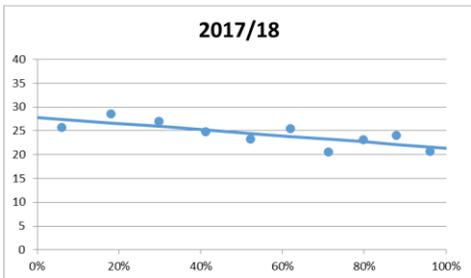
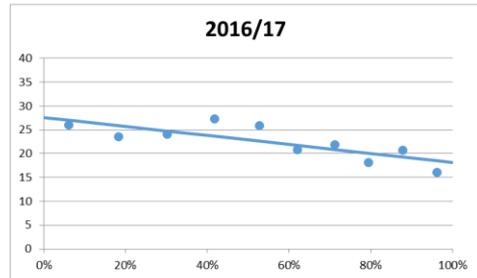
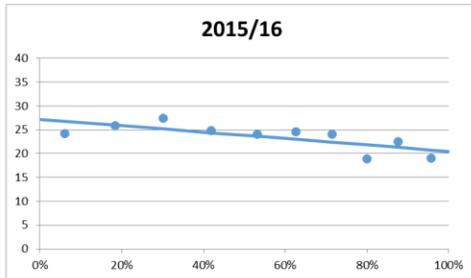
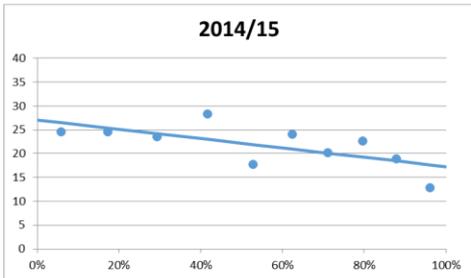
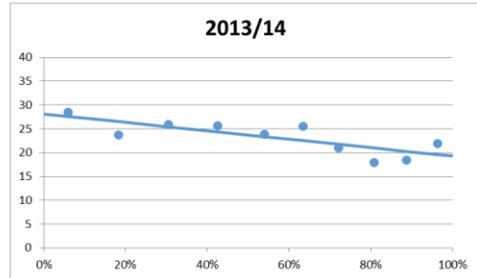
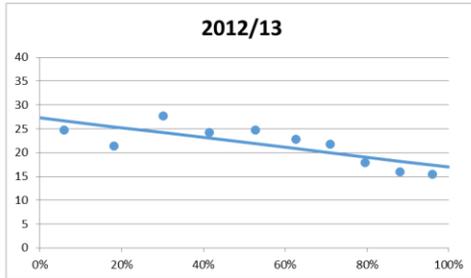
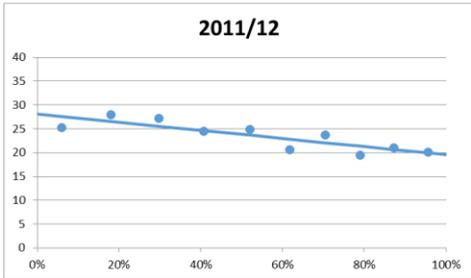
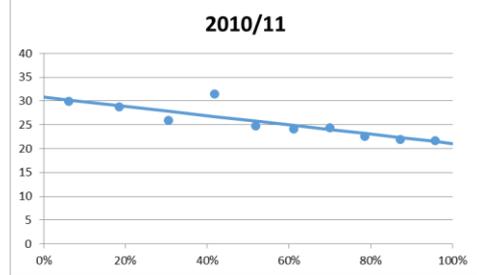
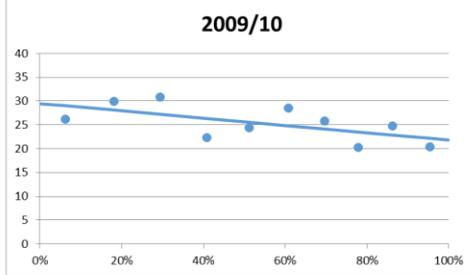
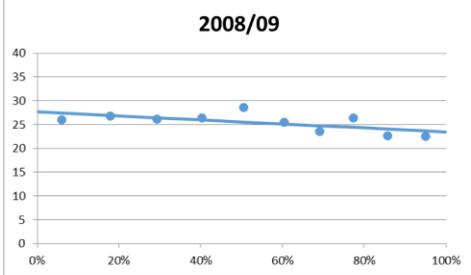
Overweight & Obesity in Reception by deprivation decile

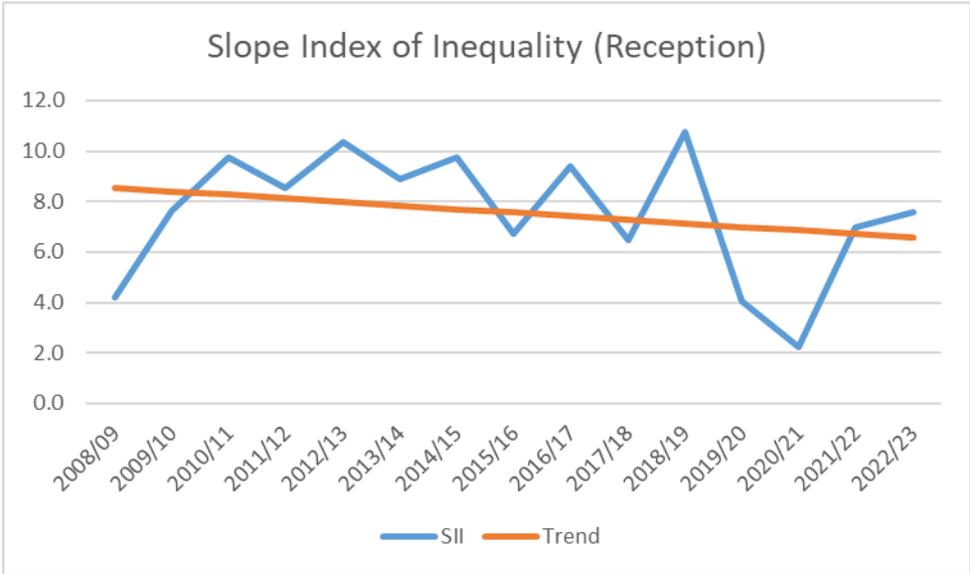
- The charts on the next slide illustrate the changes to the percentage of children who are overweight or obese by deprivation decile.
- The deprivation decile has been determined using the Index of Multiple Deprivation 2019.
- Decile 1 is Doncaster's the most deprived 10% and Decile 10 the least deprived.

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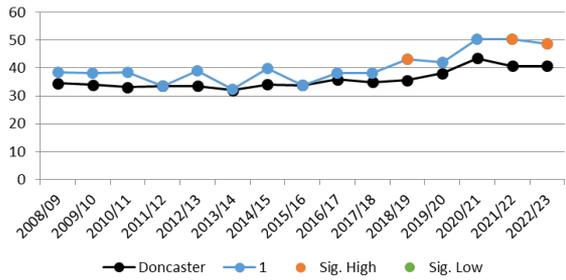
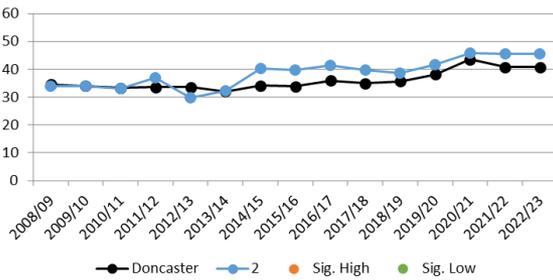
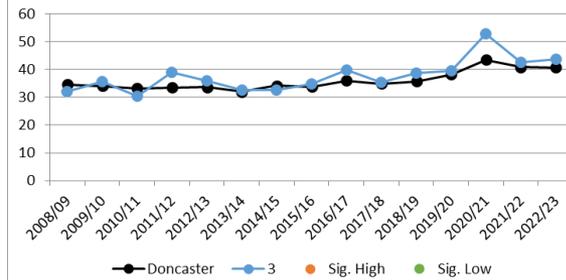
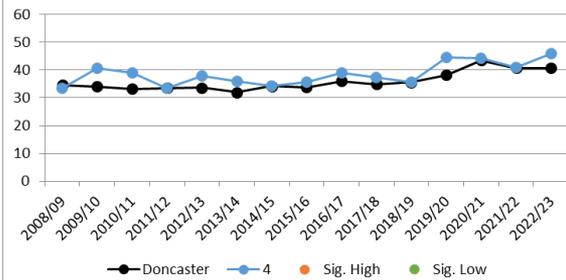
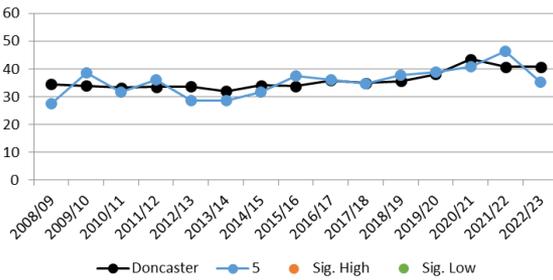
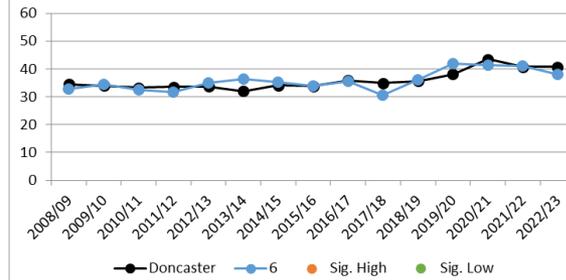
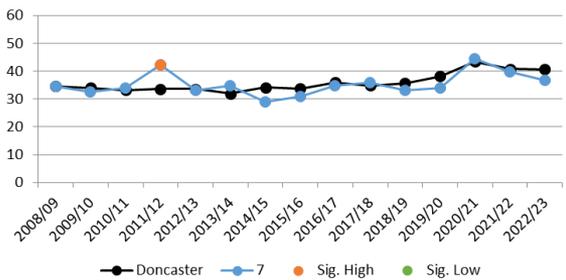
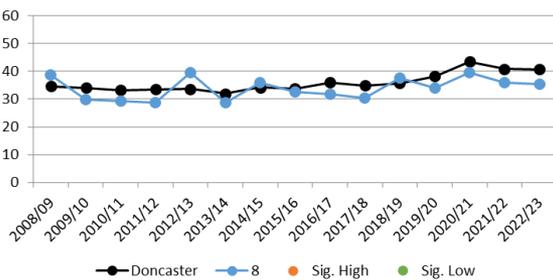
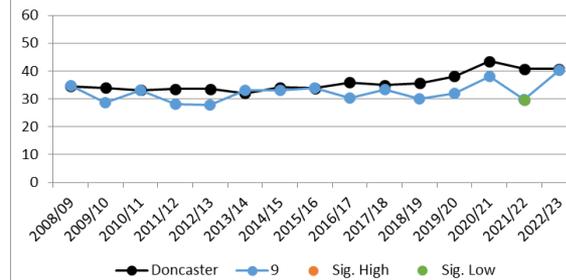
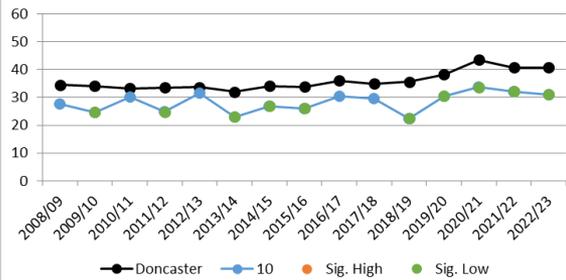
Slope Index of Inequality in Reception by deprivation decile

- The Slope Index of Inequality (SII) is a measure of social inequality. It measures the gradient of overweight and obesity across the range of deprivation.
- It is measured as the difference between the most deprived and the least deprived.
- The last table measures the change in inequality over time.

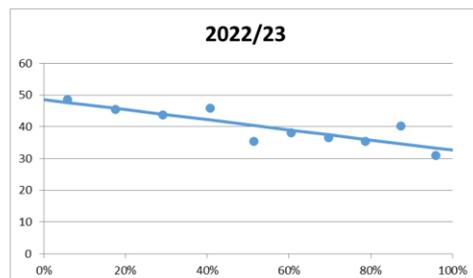
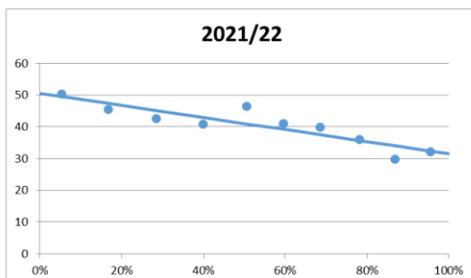
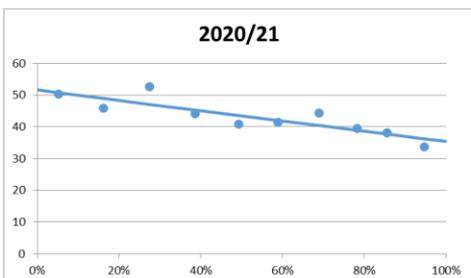
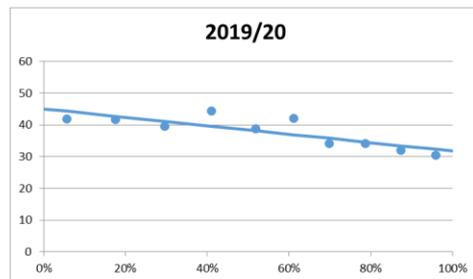
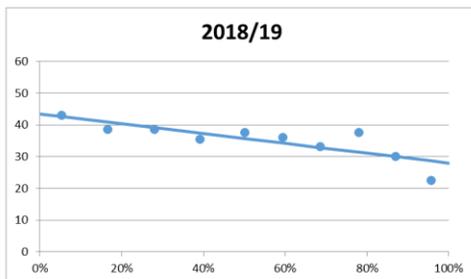
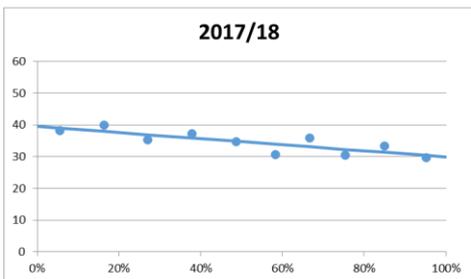
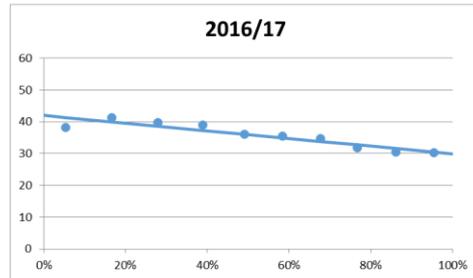
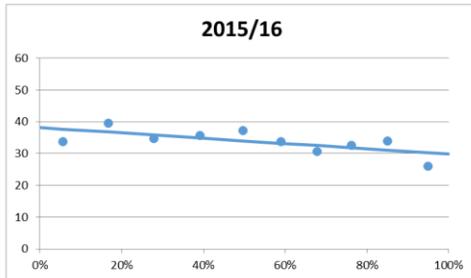
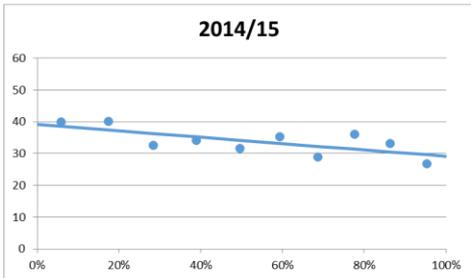
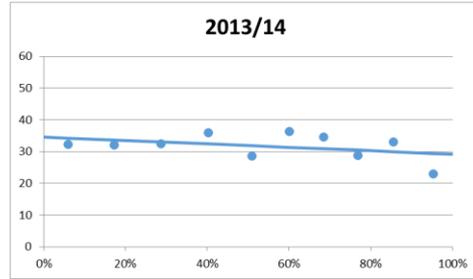
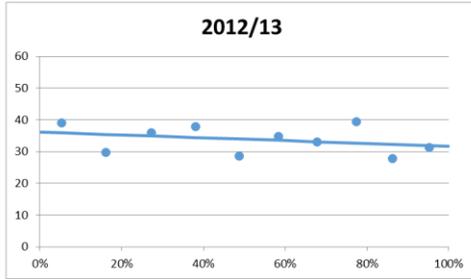
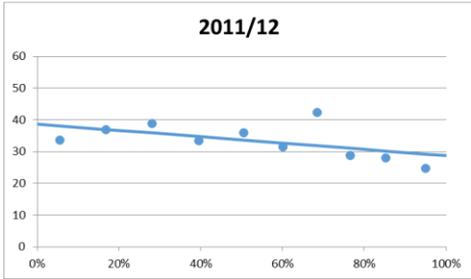
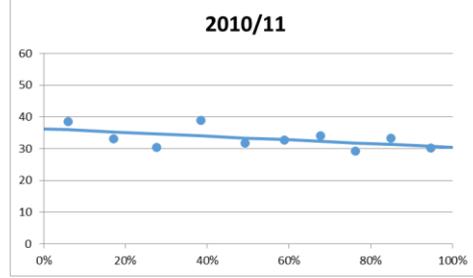
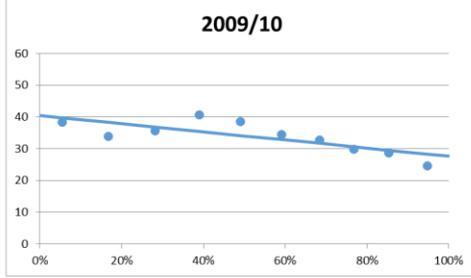
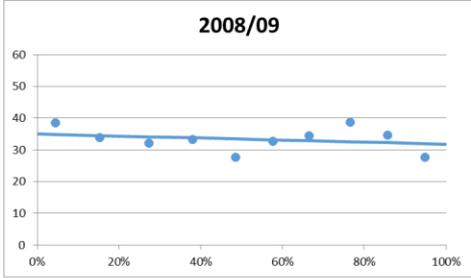


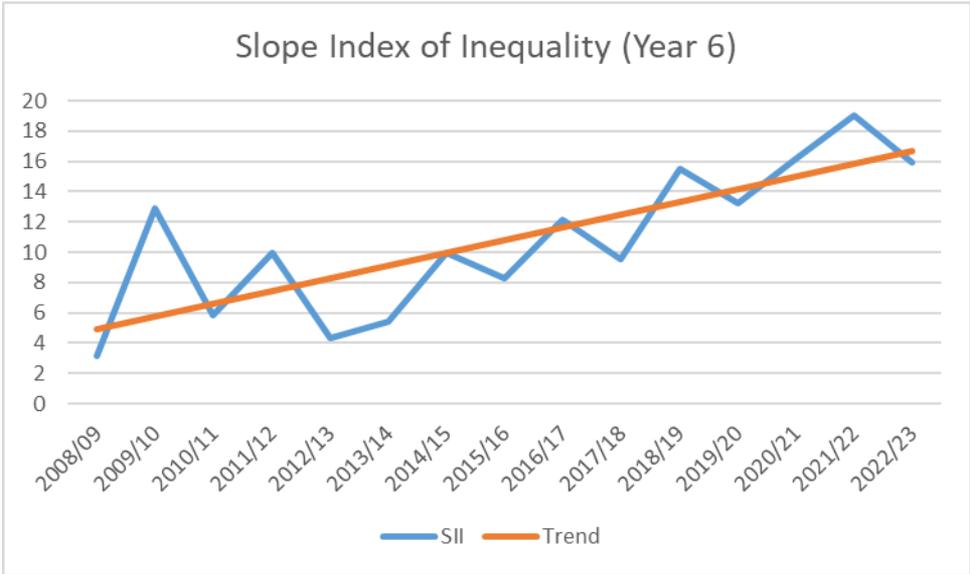


Overweight & Obese in Year 6 by deprivation deciles

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Slope Index of Inequalities in Year 6

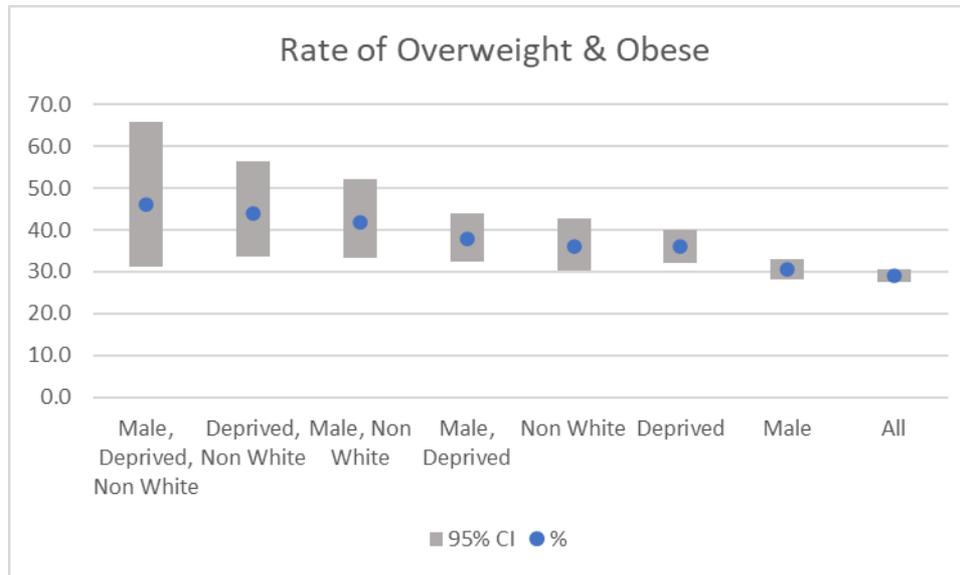




Cohort Analysis

- In 2015/16 the NCMP data started to include the NHS numbers of participants. This means that changes in the weight status can be tracked between Reception and Year 6.
- The following analysis compares children in Reception in years 2015/16 and 2016/17 to the same children in 2021/22 and 2022/23.

- The Risk Ladder illustrates the increasing risk of various factors, individually and in combination, for a child of healthy weight in reception to become overweight or obese.
- Only children who had their height and weight measured in both years and were resident in the borough were included.
- 4362 children were a healthy weight at reception. 1268 had become overweight or obese by year 6 (29.1%)



Male	Deprived 20%	Non White	num	denom	%
1	1	1	30	65	46.2
		1	62	141	44.0
1		1	80	191	41.9
1	1		178	470	37.9
		1	140	388	36.1
	1		335	932	35.9
1			665	2180	30.5
			1268	4362	29.1