

Jersey Child Measurement Programme 2023-2024

Public Health Intelligence

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Introduction

Childhood obesity and excess weight are significant health issues for children and their families. They can result in serious implications for a child's physical and mental health, which can continue into adulthood¹. The Jersey Child Measurement Programme (JCMP) data enables the government to monitor progress and plan services to tackle child obesity.

This report presents findings from the JCMP for the 2023/2024 academic year and compares them to historical trends and to England².

The height and weight of children in Reception (4 to 5-year-olds) and Year 6 (10 to 11-year-olds) are measured annually through the Jersey Child Measurement Programme (JCMP), carried out by School Nurses from Family Nursing and Home Care (FNHC). The total number of children measured in 2023/2024 was around 1,835 (95% of all eligible children). The proportion of children measured was the same as in the 2022/2023 programme (96%). The report contains analyses of Body Mass Index (BMI) classification rates by age, sex as well as geographic analyses.

Body Mass Index (BMI) can be calculated for each pupil from their height and weight measurements. Individuals are categorised as either 'underweight', 'healthy weight', 'overweight', 'obese' or 'severely obese'. As BMI does not measure body fat directly, it cannot be used as a diagnostic tool. BMI can be used as a measure to track weight status in populations and as a screening tool to identify *potential* weight problems in individuals. The proportions of Jersey's population that are of healthy weight or exceeding healthy weight and therefore at increased risk of poor health is calculated – see Notes for further information.

In this report, the term 'prevalence of obesity' is used to describe the proportion of children classified as 'obese' or 'severely obese'.

¹ [Childhood obesity: applying All Our Health - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/childhood-obesity-applying-all-our-health)

² [National Child Measurement Programme, England, 2022/23 School Year - NHS England Digital](https://www.nhs.uk/england-digital/national-child-measurement-programme-england-2022-23-school-year)

Summary

- in both Reception and Year 6, obesity prevalence was statistically similar in 2023/2024 (8% in Reception and 19% in Year 6) to the previous year (9% in Reception and 18% in Year 6)
- one in five children in Reception (20%) were classified as overweight or obese, whilst around three in ten children in Year 6 (29%) were classified as overweight or obese
- the proportion of children categorised as overweight or obese in both Reception and Year 6 was similar for females (20% in Reception and 27% in Year 6) and males (21% in Reception and 32% in Year 6)
- in Reception, there was a statistically significant decrease in the prevalence of children classified as overweight or obese from 27% in 2020/21-2022/23 to 23% in 2021/22-2023/24, based on a 3-year rolling average
- the proportion of overweight or obese children in Year 6 in the last 3 academic years from 2021/22-2023/24 (30%) is similar to the period from 2011/12-2013/14 (30%)
- children living in rural areas in Year 6 were less likely to be overweight or obese than those living in urban areas (23% in rural areas compared to 40% in urban areas)
- in Year 6, a higher proportion of children who attended non-fee-paying schools were classified as overweight or obese (34%) compared to those attending fee-paying schools (21%)
- in Reception, there was no statistically significant difference between the proportion of overweight and obese children in fee-paying (21%) and non-fee-paying schools (24%), with the gap being the lowest recorded in the last 16 years
- the proportion of children in Reception categorised as overweight and obese was similar in Jersey (20%) as in England (21%); the proportion of children in Year 6 categorised as overweight and obese was lower in Jersey (29%) than that in England (37%)

1. By age and sex

In the 2023/2024 academic year:

- around four in five (79%) of Reception children had height and weight measurements that classified them as having a healthy weight; a marginally lower proportion of children in Year 6 (69%) were a healthy weight
- obesity prevalence in Reception (8%) was lower compared to that in Year 6 (19%), (see Table 1 and Figure 1)
- one in five Reception children (20%) were overweight or obese, compared to three in ten children in Year 6 (29%) (see Table 1 and Figure 2)

Table 1. BMI classifications, percentages, Jersey, 2023/2024

	Reception	Year 6
Underweight	<1	1
Healthy weight	79	69
Overweight	12	11
Obese	6	15
Severely Obese	2	4
Combined Obese & Overweight	20	29

Note: percentages rounded to the nearest integer

Figure 1. BMI categories by year group, Jersey, 2023/2024

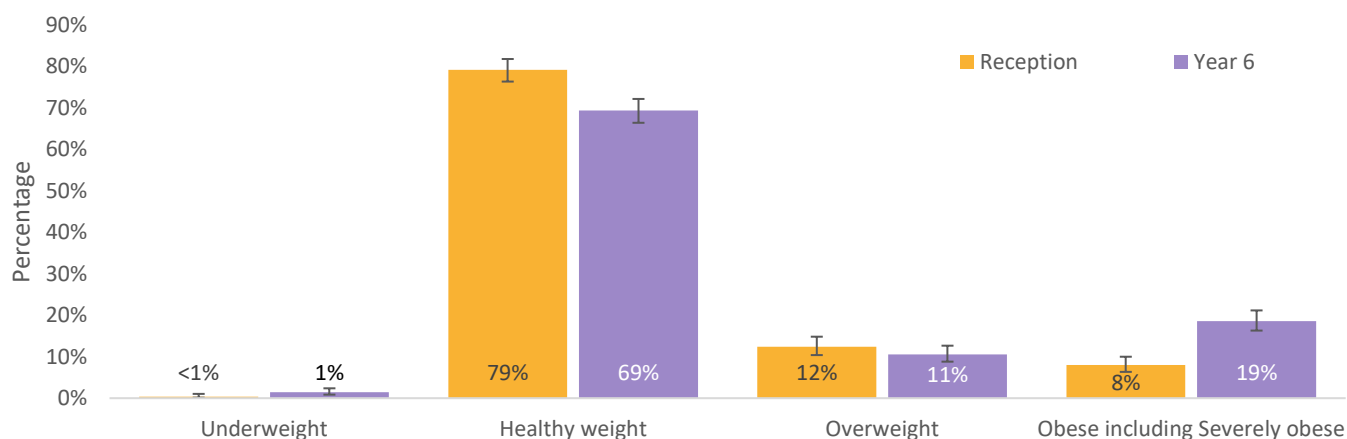
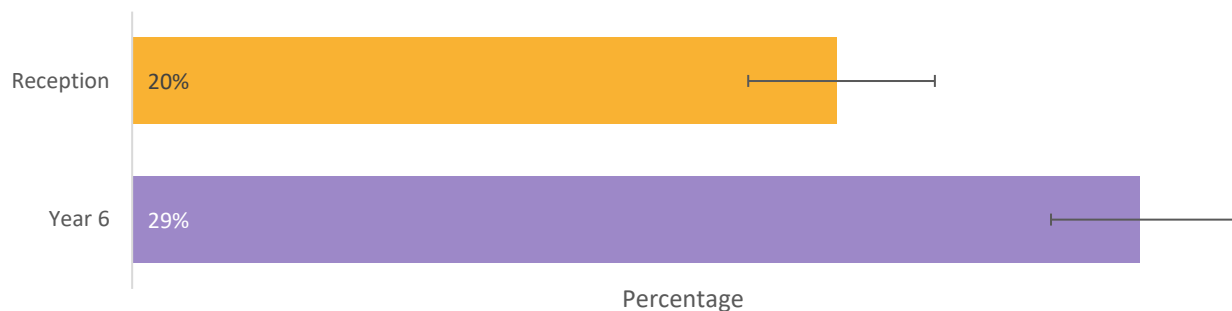


Figure 2. Prevalence of combined overweight and obesity by year group, Jersey, 2023/2024



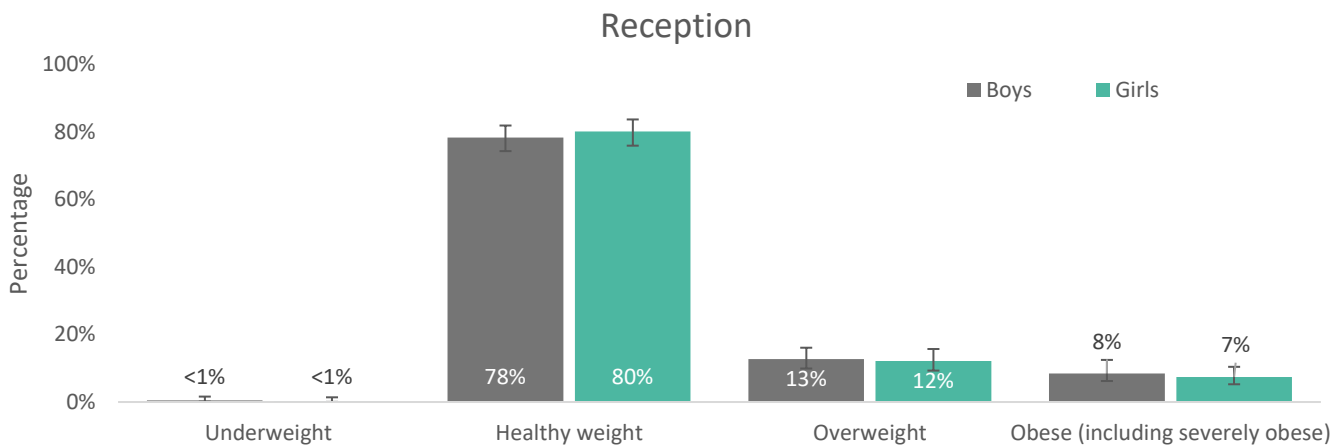
- in both Reception and Year 6, the proportions of females categorised as overweight or obese were similar to males (see Table 2)
- in Reception, 78% of boys and 80% of girls were a healthy weight; in Year 6, 67% of boys and 71% of girls were a healthy weight

Table 2. BMI classifications by sex, percentages, Jersey, 2023/2024

	Reception		Year 6	
	Boys	Girls	Boys	Girls
Underweight	<1	<1	1	2
Healthy weight	78	80	67	71
Overweight	13	12	10	11
Obese	6	6	17	13
Severely Obese	2	1	5	2
Combined Obese & Overweight	21	20	32	27

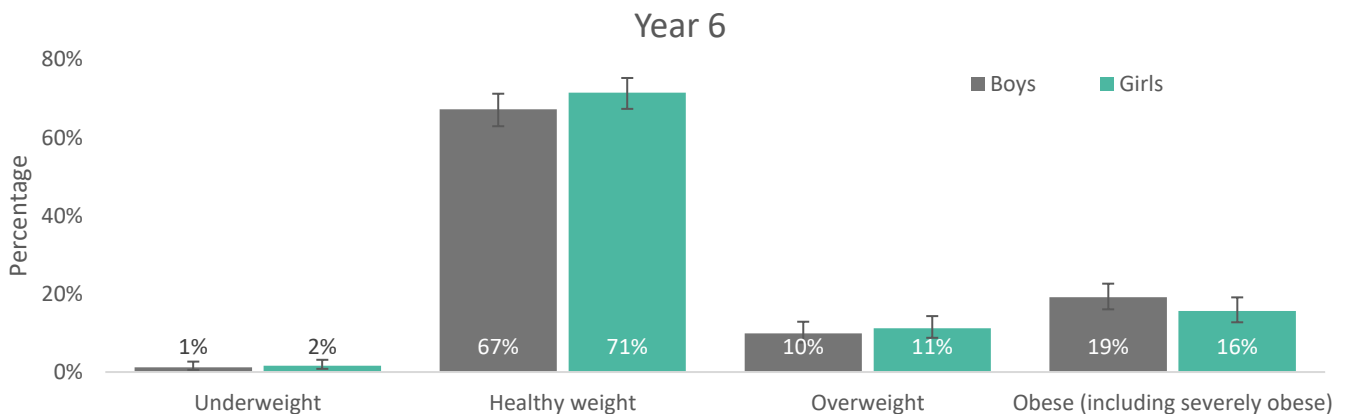
Note: percentages rounded to the nearest integer

Figure 3. Proportion of Reception children classified as underweight, healthy weight, overweight, and obese by sex, Jersey, 2023/2024



- in Year 6, the proportion of females categorised as overweight or obese (27%) was similar to males (32%), (see Table 2 and Figure 4)

Figure 4. Proportion of Year 6 children classified as underweight, healthy weight, overweight, and obese by sex, Jersey, 2023/2024



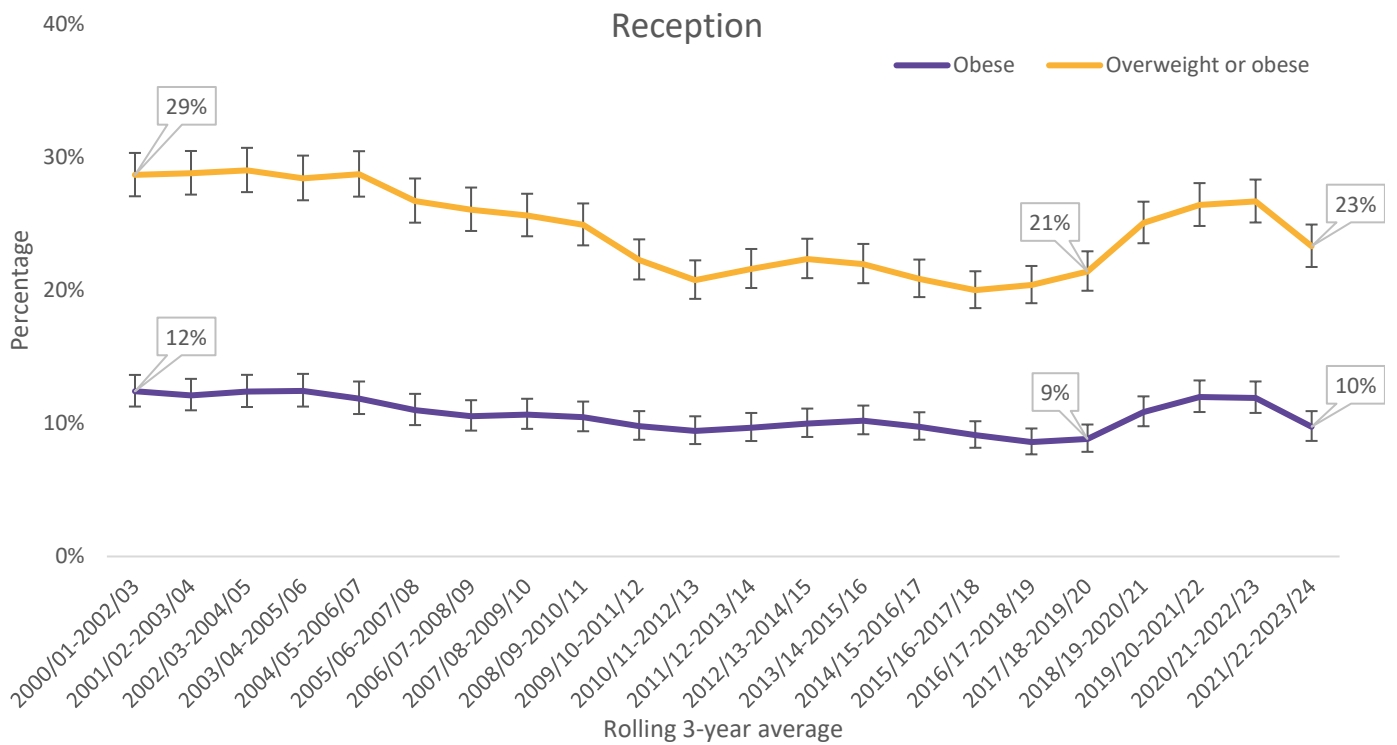
2. Trends over time

Note: In sections 2 to 4, data is considered as a rolling average over a period of three academic years, with the most recent three-year period shown being 2021/22-2023/24. The three-year combined data is more robust than a single year, and better for overall trend analysis.

Reception

- after a rise in the proportion of Reception children classified as overweight or obese between 2017/18-2019/20 and 2020/21-2022/23 (from 21% to 27%), the proportion has dropped in the most recent academic year, returning to levels similar to before this rise (see Figure 5)
- the proportion of children classified as obese over the last 3 academic years from 2021/22-2023/24 (10%) is similar to that of 10 years ago in the 2011/12-2013/14 period (10%)

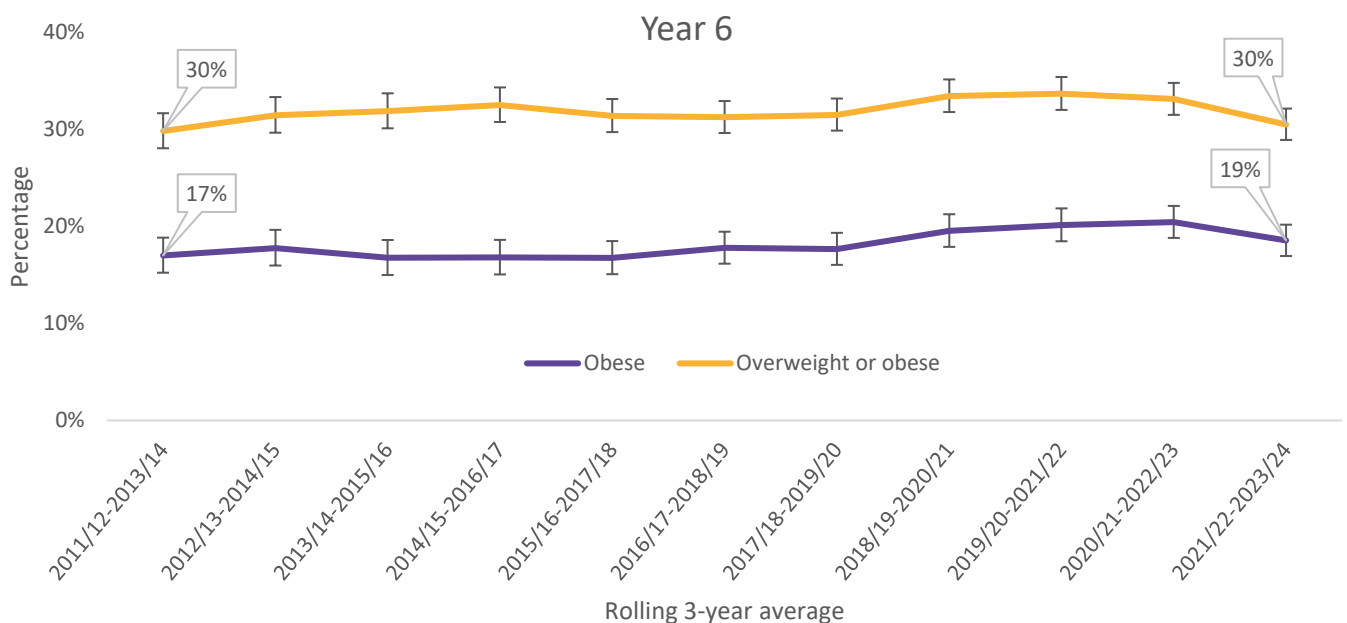
Figure 5. BMI classifications for Reception, rolling three-year averages, Jersey, academic year 2000/01-2023/24



Year 6

- the proportion of overweight or obese children in Year 6 in the most recent 3-year period from 2021/22-2023/24 (30%) is similar to 10 years ago (2011/12-2013/14, 30%) (see Figure 6)
- the proportion of obese children in Year 6 in 2021/22-2023/24 (19%) is also similar to 2011/12-2013/14 (17%)

Figure 6. BMI classifications for Year 6, three-year averages, Jersey, academic year 2011/12-2023/24

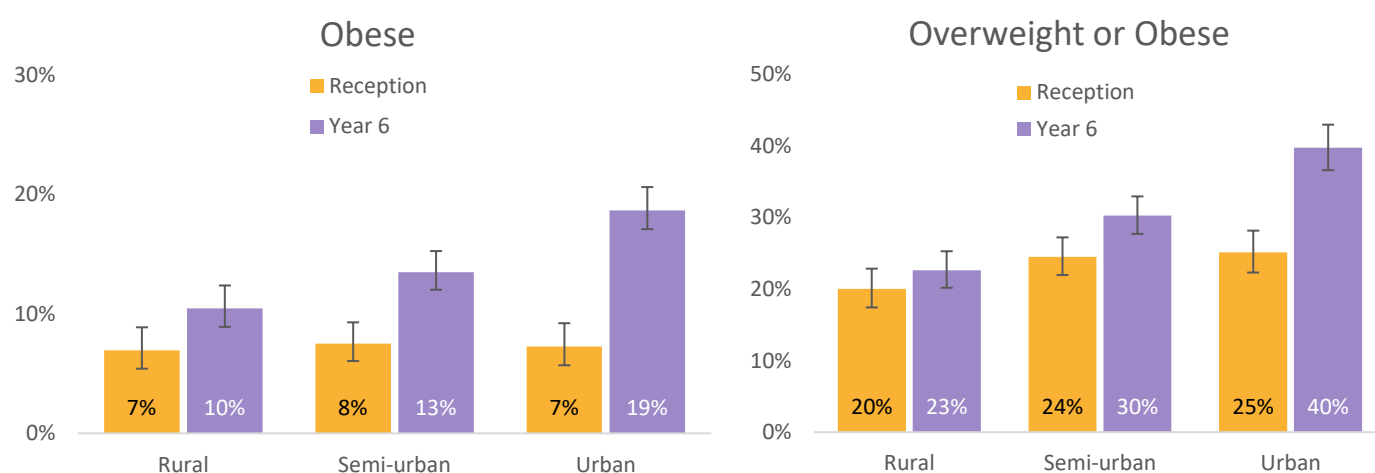


3. By parish of residence

The parish of residence of each child was categorised as ‘urban’, ‘semi-urban’ or ‘rural’³

- in ‘urban’ parishes in Year 6, the prevalence of children classified as overweight or obese was higher (40%) than the proportion in ‘rural’ (23%) and ‘semi-urban’ (30%) areas (see Figure 7)
- for Year 6 children living in ‘urban’ parishes, a higher proportion were obese (19%) compared to those living in ‘rural’ and ‘semi-urban’ areas (10% and 13% respectively)
- unlike previous years, the proportion of children classified as overweight or obese in ‘urban’ parishes in Reception (25%) was not significantly higher than the proportion in ‘rural’ areas (20%) as seen in previous years; this is due to a larger reduction in the proportion of children classified as overweight or obese in ‘urban’ parishes compared to other parishes
- a similar proportion of children living in ‘urban’ parishes in Reception were obese (7%) compared to those living in ‘rural’ and ‘semi-urban’ areas (7% and 8% respectively)

Figure 7. BMI classifications by parish type, Jersey, 2021-2023 (three-year average), based on parish of child



4. By type of school attended

The school type of each child was categorised as ‘fee-paying’ or ‘non-fee-paying’⁴

- in Year 6, a higher proportion of children who attended non-fee-paying schools were overweight or obese (34%) compared to children who attended fee-paying schools (21%) (see Figure 8)
- unlike previous years, there was no significant difference between the proportion of children in Reception classified as overweight or obese in fee-paying and non-fee-paying schools (21% and 24%, respectively) (See Figure 8 and Figure 9a)

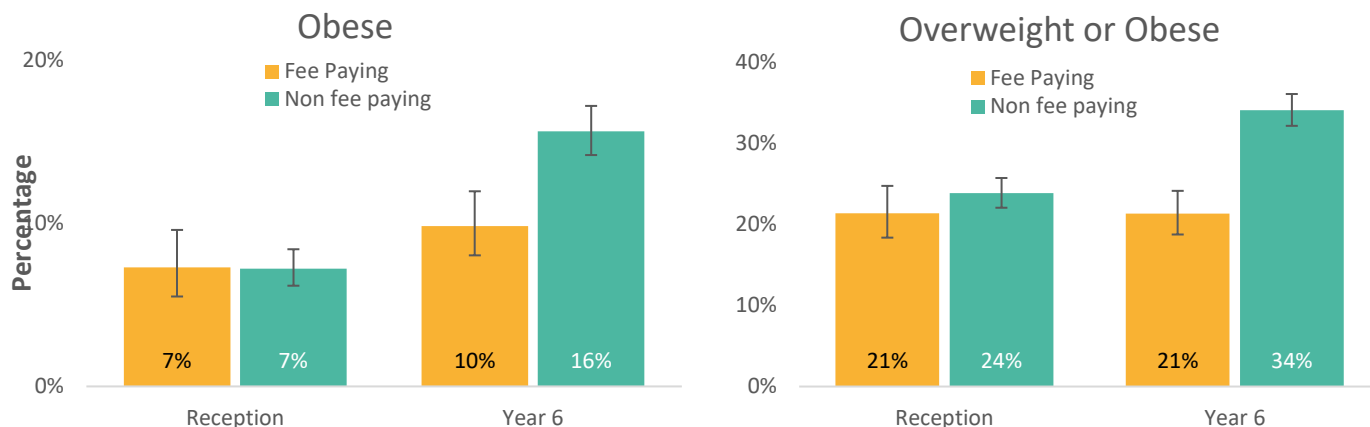
³ The parish of residence of each child was classified into:

- *Urban* – St Helier
- *Semi-urban* – St Brelade, St Clement, St Saviour
- *Rural* – Grouville, St John, St Lawrence, St Martin, St Mary, St Ouen, St Peter, Trinity

⁴ School attended by each child were classified into: *Fee-paying* – Beaulieu, De La Salle, FCJ, Helvetia House, JCG Preparatory, St. Christopher’s, St. George’s, St. Michael’s, Victoria College Preparatory

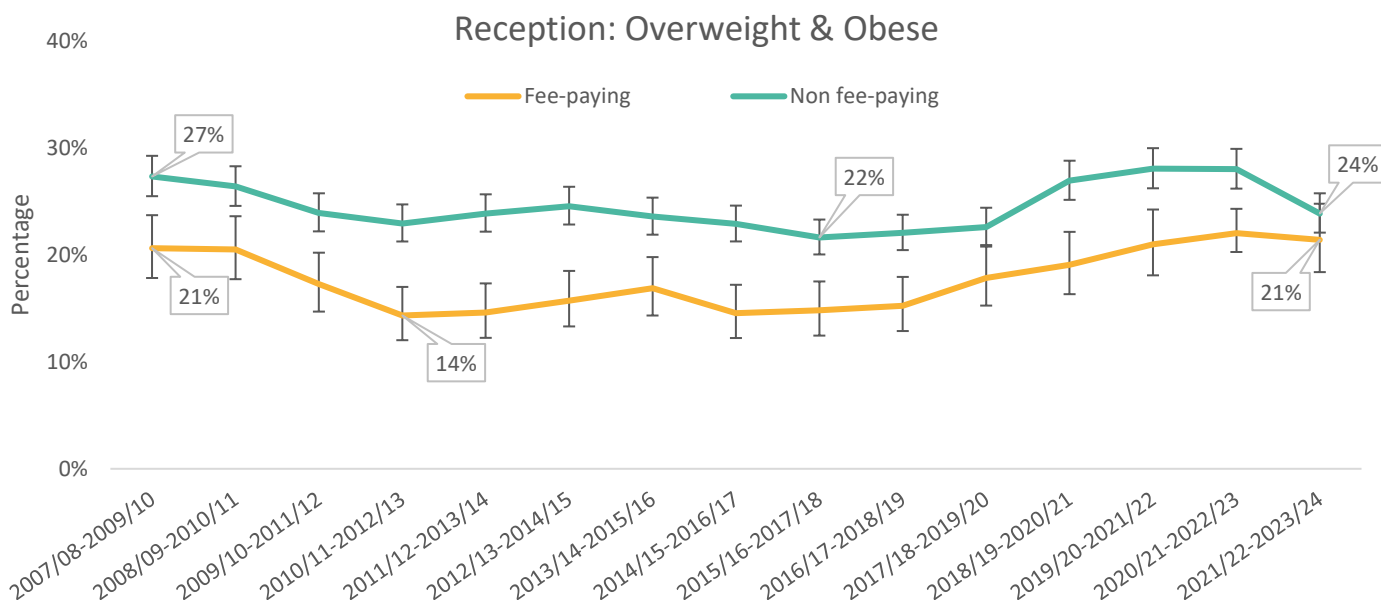
Non-fee-paying – Bel Royal, D’Auvergne, First Tower, Grands Vaux, Grouville, Janvrin, La Moye, Les Landes, Mont Nicolle, Plat Douet, Rouge Bouillon, Samares, Springfield, St. Clement, St. John, St. Lawrence, St. Luke, St. Martin, St. Mary, St. Peter, St. Saviour, Trinity

Figure 8. BMI classifications by school type, percentage, Jersey, 2021/22-2023-24 (three-year average)



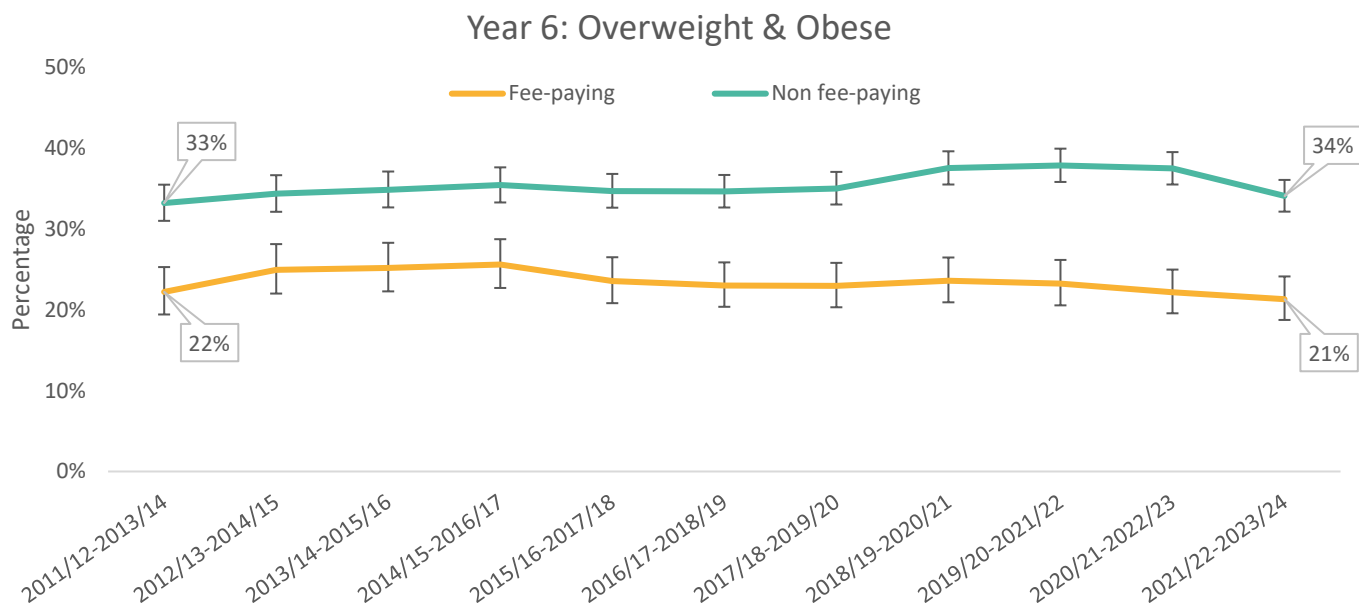
- in Reception, the prevalence of overweight or obese children in non-fee-paying schools fell from 27% in 2007/08-2009/10 to 22% in 2016/17-2018/19; there was then a 6 percent increase between 2016/17-2018/19 and 2020/21-2022/23 to 28%, before falling back to 24% in 2021/22-2023/24 (See Figure 9a)
- over the period 2007/08-2019/20, the prevalence of children in Reception classified as overweight or obese and attending fee-paying schools fell from 21% in 2007/08-2009/10 to 14% in 2010/11-2012/13; the prevalence then gradually increased to 21% in 2021/22-2023/24
- in Reception, there was no statistically significant difference between the proportion of overweight and obese children in fee-paying and non-fee-paying schools, with the gap being the lowest recorded in the last 16 years

Figure 9a. Proportion of children in Reception classified as overweight or obese, by school type, Jersey, academic year 2007/08-2023/24 (three-year averages)



- in Year 6, the prevalence of children classified as overweight or obese in non-fee-paying schools has remained relatively stable, and has returned to 34%, a level similar to that in 2011/12-2013/14 (33%) (see Figure 9b)
- the prevalence of children in Year 6 who are overweight or obese and attend fee-paying schools in Year 6 has not changed significantly between 2011/12-2013/14 and 2021/22-2023/24 (See Figure 9b)

Figure 9b. Proportion of children in Year 6 classified as overweight or obese, by school type, Jersey, academic year 2007/08-2023/24 (three-year averages)



5. Group changes

Children in Year 6 in the academic year 2023/2024 were previously in Reception in 2017/2018. Table 3 compares the BMI classifications for those children measured in Reception in 2017/2018 in Jersey, with those measured in Year 6 in 2023/2024 in Jersey. Due to inward and outward migration between the two time points, not all the same children in Year 6 will be included in the Reception data, and vice versa.

- a lower proportion of the group were overweight and obese when in Reception in 2017/2018 (20%) compared to the group when in Year 6 in 2023/2024 (29%) (see Table 3)
- the prevalence of obesity (including severely obese) was lower in the Reception group in 2017/2018 (9%) compared to the Year 6 group in 2023/2024 (19%)

Table 3. BMI classifications, percentages, Jersey

	2017/2018 Reception	2023/2024 Year 6
Underweight	<1	1
Healthy weight	80	69
Overweight	11	11
Obese	7	15
Severely Obese	2	4
Combined Overweight & Obese	20	29

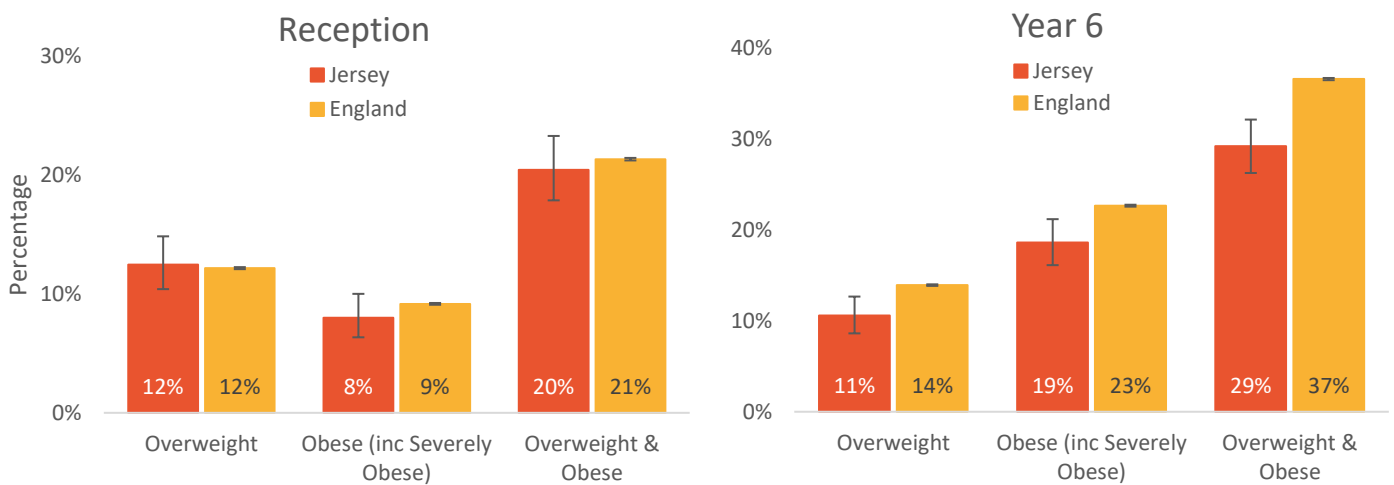
Note: percentages rounded to the nearest integer

6. Comparison to England⁵

The National Child Measurement Programme (NCMP) in England also measures the height and weight of children in Reception (aged 4 to 5) and Year 6 (aged 10 to 11) to assess overweight and obesity levels in children within primary schools. As the England 2023/24 data is not yet published, comparisons are made to the 2022/23 data (the latest available).

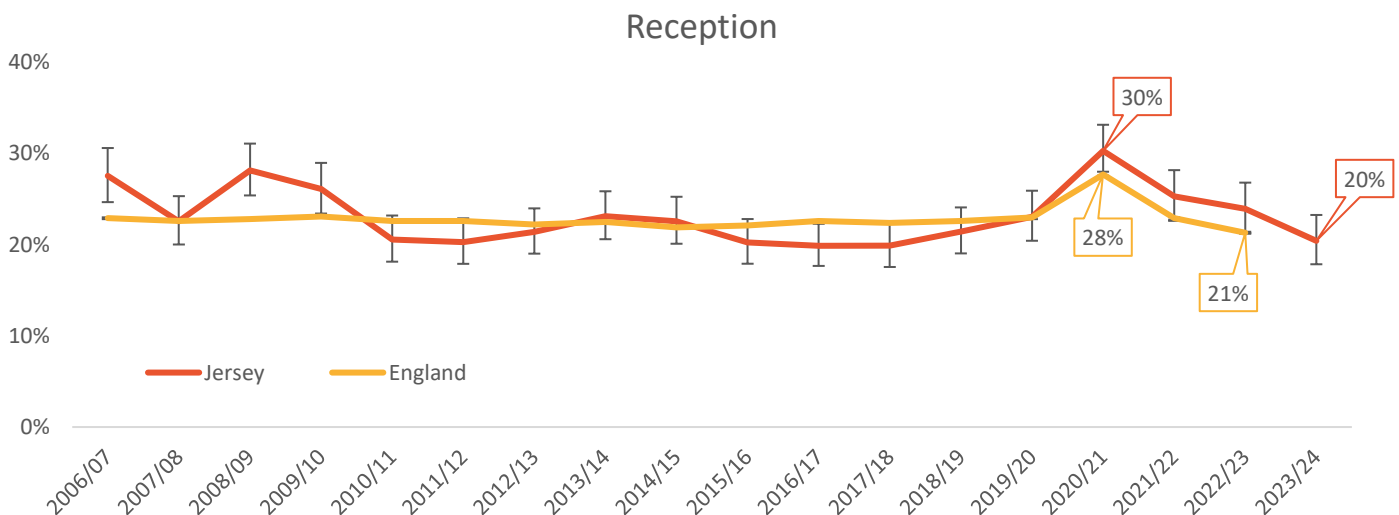
- in Reception, the proportion of overweight and obese children was similar in Jersey (20%) compared to England (21%), (Figure 10)
- in Year, 6 the proportion of overweight and obese children was lower in Jersey (29%) compared to England (37%)

Figure 10. Prevalence of overweight and obesity, comparison of Jersey 2023/2024 to England 2022/2023



- the prevalence of Reception children classified as overweight or obese in Jersey was relatively stable between 2010/2011 and 2019/2020; there was a 7 percent increase from 23% in 2019/2020 to 30% in 2020/2021 which has since steadily decreased to 20% in 2023/2024
- England followed a very similar trend during the period 2019/2020 to 2022-2023 (Figure 11)

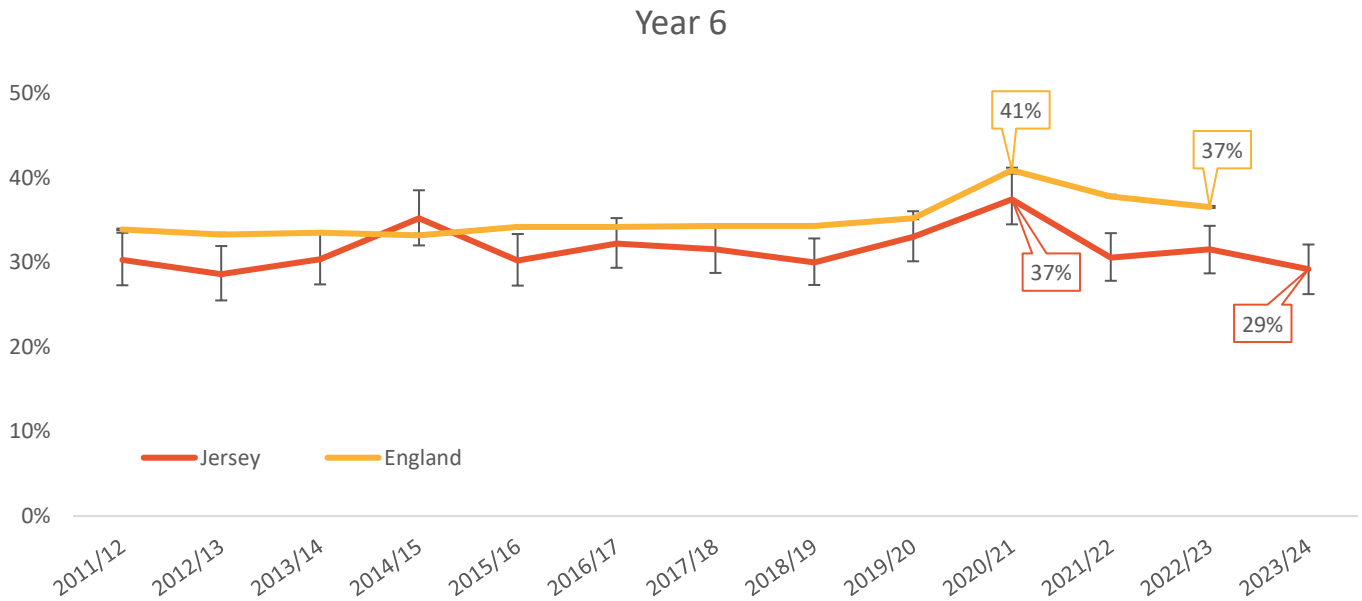
Figure 11. Prevalence of overweight and obesity, Reception comparison of Jersey (2006-2023) to England (2006-2022)



⁵ National Child Measurement Programme, England, 2022/23 School Year - NHS England Digital

- for Year 6 in England, the prevalence of overweight and obesity remained relatively stable from 34% in 2011/12 to 35% in 2019/20 and then increased by 6 percentage points to 41% in 2020/21; this has decreased to 37% in 2022/23
- for Year 6 in Jersey, the prevalence of overweight and obesity also remained relatively similar from 2011/12; the prevalence of obesity reached 37% in 2020/21, and decreased to 29% in 2023/24
- the prevalence of children who were overweight or obese in Year 6 in Jersey has consistently been lower than or similar to England (Figure 12)

Figure 12. Prevalence of overweight and obesity, Year 6 comparison of Jersey (2011-2023) to England (2011-2022)



- findings from the 2022/2023 NCMP data for England show decreases in the proportions of children in Reception and Year 6 who are classified as overweight or obese compared to 2020/2021
- it is worth noting that the 2020/21 academic year was the highest recorded prevalence of overweight and obesity in both Reception and Year 6 for Jersey and England. This was also during the height of the COVID pandemic

7. Comparison to Guernsey⁶

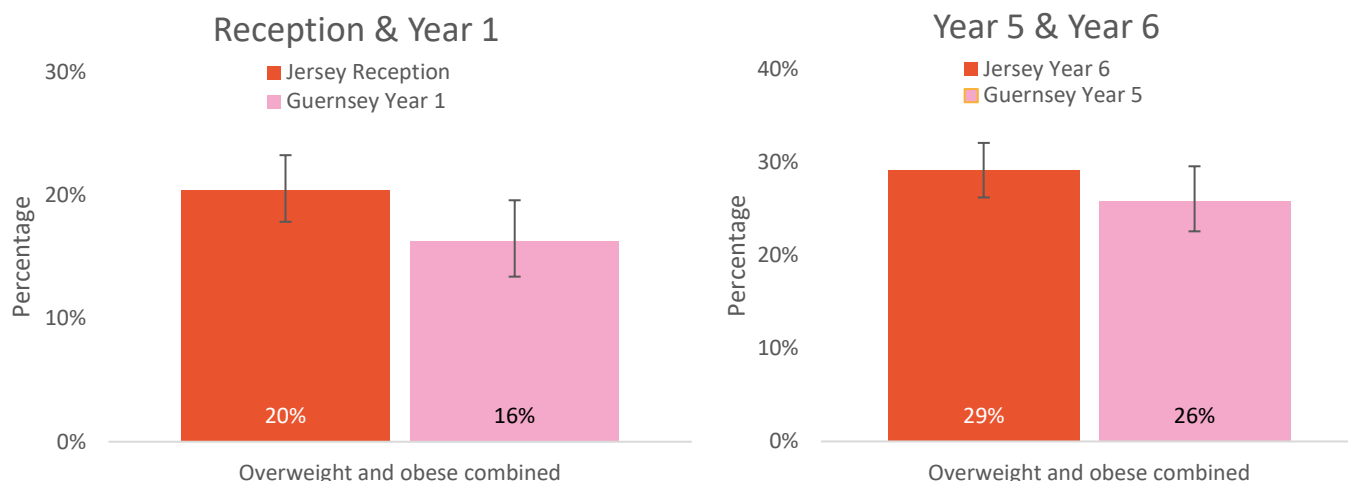
The Guernsey Child Measurement Programme (GCMP) measures the height and weight of children in Year 1 (aged 5 to 6) and Year 5 (aged 9 to 10) to assess overweight and obesity levels in children within primary schools. Note that these Year groups are slightly different to the Year groups measured in the Jersey and English programmes (Reception and Year 6).

- the proportion of overweight and obese children was similar in both the Jersey Reception (20%) and Guernsey Year 1 (16%) cohorts, as well as the Jersey Year 6 (29%) and Guernsey Year 5 (26%) cohorts (see Figure 13)

Please refer to the “Comparison to Guernsey” segment within the notes section of this report for more information on the methodology used to compare data from Jersey and Guernsey.

⁶ [Findings from the Guernsey Child Measurement Programme 2023 - States of Guernsey](#)

Figure 13. Prevalence of overweight and obesity, comparison of Jersey 2023/2024 to Guernsey 2023/2024



Notes

The Jersey Child Measurement Programme began in 1995, measuring the heights and weights of children attending Jersey schools in Reception. It was extended in the 2011/2012 academic year to include measuring the heights and weights of Year 6 children. Children who attend independent and special schools are excluded. The children are measured by the FNHC School Nursing during the school year with the programme running between September and August each year to coincide with the academic year offering support if needed. This evidence-based programme focuses on prevention and early help, the School Nursing team is focused on reducing inequalities in health and promoting inclusion.

BMI categories

The height and weight measurements of children are used to calculate their Body Mass Index (BMI)

$$\text{BMI} = \frac{\text{weight (kg)}}{\text{height (m)} \times \text{height (m)}}$$

The BMI is then converted into a centile, which can be used to classify each child into **underweight, healthy weight, overweight, obese, or severely obese**.

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. A child's BMI centile is a measure of how far a child's BMI is above or below the average BMI value for their age and sex in a reference population. The JCMP 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 **epidemiological** definition is used for the majority of this report for summaries of whole cohort and population groups.

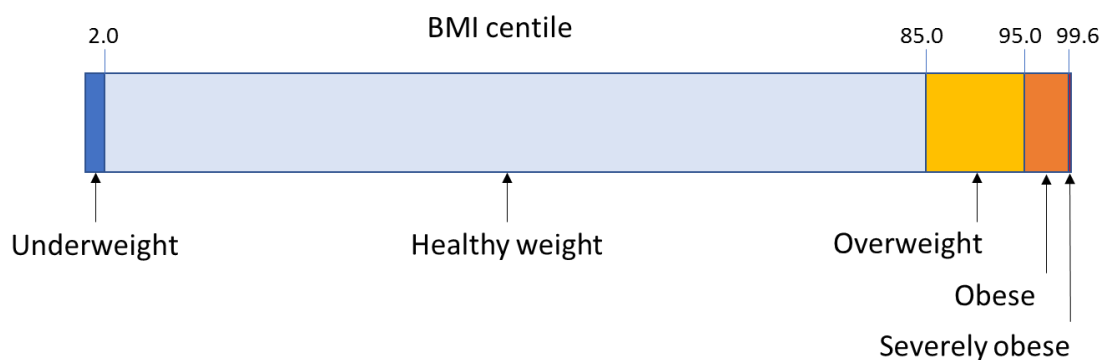
The **epidemiological** classification system uses the British 1990 growth reference (UK90)⁷ to determine weight status according to a child's age and sex and is used for this report for summaries of whole cohort and population groups.

⁷ 'Growth monitoring with the British 1990 growth reference'. *Cole Arch Dis Child*.1997; 76: 47-49 as used by ONS in the National Child Measurement Programme.

The **epidemiological** definition is as follows:

- BMI centile ≤ 2 : Underweight
- BMI centile > 2 and < 85 : Healthy weight
- BMI centile ≥ 85 and < 95 : Overweight
- BMI centile ≥ 95 : Obese
- BMI centile ≥ 99.6 Severely obese. Note: “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”

Figure 14: Centile boundaries for each weight category – epidemiological



Comparison to Guernsey

Comparisons between the Jersey Reception and Guernsey Year 1 cohort and the Jersey Year 6 and the most recent data available from Guernsey Year 5 cohort have been included in this report. It very important to note that children develop rapidly during their early years, and small differences in age can significantly impact their measurements.

Comparing children from different year groups means comparing children at different stages of growth and development. Because of this, in-depth analysis between Jersey and Guernsey has not been included, and differences in cohorts must be considered when interpreting the comparisons.

Participation

Participation in the JCMP is not compulsory and each year a small number of parents choose for their children not to take part.

Potential bias due to non-participation was investigated for the English National Child Measurement Programme by NHS Digital, who found that obesity prevalence was underestimated by around 1 percentage point. This bias was found to decrease as the participation rate increased⁸. Any potential effect from non-response bias in the JCMP is anticipated to be of a similar magnitude given the high participation rates observed.

⁸ For a participation rate of 80 per cent in 2006/2007, it was estimated that the obesity prevalence was underestimated by 1.3 percentage points (pp); and for a participation rate of 88 per cent in 2007/2008, the underestimate of obesity prevalence reduced to 0.8 pp

Confidence intervals, significance, and disclosure control

Confidence intervals are quoted in the publication and included in the tables to indicate this variation.

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”. When a comparison does not show a statistically significant difference, this will be described using terms such as “similar to” or “the same as”.

In the statistical publication text and excel tables, percentages are rounded. Differences are calculated from the rounded figures in the Excel tables and then shown in the text.

Ethnicity

Ethnicity is not used as a variable of analysis in this report, as the ethnicity data held is not currently of suitable quality. The lack of standardized, self-identified race and ethnicity is a critical limitation of the available data.

Data Validation

The accuracy and reliability of the dataset underpinning the analyses in the report is ensured by a validation procedure.

Submitted records are checked that all mandatory data items have been provided and data validation rules have been met.

- Records with missing data items are rejected.
- Invalid data items (e.g., children's height and weight measured at different times) are rejected.
- Unexpected data items (e.g., "extreme" heights) generate warning flags that require FNHC confirmation.
- measurements should not be rounded to the nearest whole or half kilogram or whole or half a centimetre; the proportion of records where the recorded height is exactly a centimetre or half a centimetre should not exceed 20%

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