Excess weight in primary school children

By the time they leave primary school, one in three children in Cheshire West and Chester are an unhealthy weight.

Reception 2015/16
- Underweight 0.4%
- Healthy weight 79.2%
- Overweight 12.3%
- Obese 8.2%

Year six 2015/16
- Underweight 1.4%
- Healthy weight 65.1%
- Overweight 14.8%
- Obese 18.8%

In Cheshire West and Chester, levels of obesity in children double between reception and year six.
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The National Child Measurement Programme (NCMP) measures the height and weight of children in reception class (aged four to five years) and year six (aged ten to eleven years) to assess overweight and obesity levels in children within primary schools. Currently, in Cheshire West and Chester, levels of obesity in children double between reception and year six. By the time they leave primary school, a third of children in Cheshire West and Chester are an unhealthy weight.

Excess weight (overweight and obesity) in children often leads to excess weight in adults, and this is recognised as a major determinant of premature mortality and avoidable ill health. In the long term, childhood obesity is associated with diabetes, asthma, sleep disorders and various other conditions. There is also evidence that the overweight or obese child suffers from bullying and stigma with loss of self-esteem which may lead to depression and under-achievement.

Reception age children (four and five year olds)

In 2015/16 just over one fifth of Cheshire West and Chester children in their school reception year were an unhealthy weight. One in every 12 children in the age group was obese, a reduction from the previous year.

In 2015/16, over 98 percent of our eligible children participated in the national child measurement programme, a higher uptake rate than both the national average and the previous year. Results show that, with 20.5% of children overweight or obese, Cheshire West and Chester has a significantly lower prevalence compared to the England average (22.1%), an improvement from the previous year when Cheshire West and Chester was statistically similar to England. The proportion of children considered obese (8.2%) is significantly lower than England (9.3%). The proportion of overweight children is also lower than England but not significantly so (12.3% compared to 12.8%). A small percentage of children are underweight (0.4%) which is better than England (0.86%).

In 2015/16, differences between local Clinical Commissioning Groups (CCGs) were not significant. Both West Cheshire CCG and Vale Royal CCG have levels of overweight and obesity in reception aged children which are lower than, but statistically similar to England.

Ward level data for the three year period 2013/14 to 2015/16 shows large variation within Cheshire West and Chester at ward level. Prevalence ranges from 33.9% in Netherpool ward (Ellesmere Port locality) to 10.5% in Willaston and Thornton ward (Rural locality). Eight wards showed rates of excess weight which were significantly higher than the England average, six were within the Ellesmere Port locality. The remaining two wards with rates of excess weight significantly higher than England were Elton in the Rural locality (adjacent to Ellesmere Port),
Excess weight in primary school children cont.

and Blacon in the Chester locality. There were five wards with rates of excess weight significantly lower than England, these were Davenham and Moulton, Hartford and Greenbank and Marbury, all within the Northwich and Winsford locality, Newton (Chester Locality) and Willaston and Thornton (Rural locality). There was no significant difference when compared to England within the other wards.

Looking at trends over time, there has been some variation in the excess weight of reception aged children. Current levels of excess weight in Cheshire West and Chester are the lowest they have been since 2008/09. At a CCG level, significant differences that had been observed in previous years have in 2015/16 become minimal.

There is a strong correlation between deprivation and child obesity prevalence. Our most deprived areas have a significantly higher proportion of children with excess weight (26.1%) than our least deprived areas (15.0%). Prevalence of obesity is more than double in reception age children living in our most deprived areas (11.0%) compared to our least deprived areas (5.4%).

Levels of excess weight have reduced in both our most and least deprived areas since 2008/09, however the gap between the most and least deprived areas has widened, from 9.5 percentage points difference in 2008/09 to 11.1 percentage points in 2015/16.

Nationally, boys experience a significantly higher prevalence of excess weight than girls and this pattern is reflected locally although the difference is not significant.

Year six children (ten and eleven year olds)

In 2015/16 over a third of Cheshire West and Chester children in their final year at primary school were an unhealthy weight. Almost one in five children in this age group were obese, more than double the proportion of children who were identified as obese in the reception age group.

In 2015/16, over 95% of our eligible children took part in the annual national child measurement programme, which is higher than both the national average and the previous year. Recording 33.6% of children as either overweight or obese, Cheshire West and Chester was not significantly
Some differences between local Clinical Commissioning Groups (CCGs) are again observed in year six children, although this is not significant. West Cheshire CCG has slightly higher levels of excess weight and obesity in year six children compared to Vale Royal CCG; both CCGs have prevalence rates which are lower than England, but not significantly so.

The NCMP program has been running for more than 7 years meaning that it is possible to directly compare levels of obesity and overweight in cohorts of children in their reception year and when they reach year six.

Since their reception year in 2009/10, the current year six cohort has seen obesity prevalence double. The percentage of overweight children in the cohort has remained the same while the percentage of children in the cohort of a healthy weight has decreased. There is an increase in underweight between reception year and year six, from 0.3% to 1.36%

Looking at trends for year six children over time, excess weight levels in Cheshire West and Chester have shown some variation. Current prevalence is slightly higher than in 2008/09 however the difference is not significant. Since 2008/09 the England average has increased significantly. Vale Royal CCG consistently exhibits lower excess weight rates than West Cheshire CCG (except in 2012/13) although the rates are not significantly different.

There is a strong correlation between deprivation and child obesity prevalence. In our most deprived areas, excess weight prevalence in children aged 10-11 years old is 42.2%, significantly higher than prevalence in our least deprived areas (28.8%). Inequality is seen most starkly in the obesity category where the rate in our most deprived areas (25.1%) is more than double the rate in our least deprived areas (11.8%). Since 2008/09 levels of excess weight have risen in both our most and least deprived areas, however the increase has been larger in the most deprived areas, widening the inequality gap.
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At ward level, excess weight rates for year six children in Cheshire West and Chester for the three year period of 2013/14 to 2015/16 ranged from 46.1% in Ellesmere Port Town ward (Ellesmere Port locality) to 19.4% in Garden Quarter ward (Chester locality). Seven wards showed rates of excess weight which were significantly higher than the England average, of which six were in the Ellesmere Port locality; the seventh ward was Blacon in the Chester locality. Six wards showed significantly lower rates of excess weight compared to England, these were Upton in Chester locality, Chester Villages, Farndon and Gowy in Rural locality and Hartford and Greenbank ward, and Weaver and Cuddington ward, in Northwich and Winsford locality.

Nationally, boys in year six continue to have a significantly higher prevalence of excess weight compared to girls. This pattern is reflected locally although, as is seen in reception aged children, the difference is not significant.

Statistical significance of excess weight rates in year six children by ward in 2013/14-2015/16 (three years pooled) as compared to England, with ward and locality boundaries

Evidence of what works

- The 2016 childhood obesity policy\(^1\) states that “while obesity is a complex problem, at its root, obesity is caused by an energy imbalance: taking in more energy through food than we use through activity.” Improving diets and increasing active lifestyles are key factors in managing obesity levels.
- Long-term, sustainable change will only be achieved through the active engagement of schools, communities, families and individuals.
- Evidence shows that slowly changing the balance of ingredients in everyday products, or making changes to product size, is a successful way of improving diets\(^2\).
- Offering healthy food choices in schools and introducing physical activity initiatives such as the Smile for a Mile are effective ways to tackle poor diets and sedentary lifestyles.
- Tailored intervention is recommended for those children and young people with BMI at or above 91st centile.

Recommended actions for commissioners

1. Ensure a range of opportunities for children and young people to take part in formal and informal active play, such as provision of parks, greenspaces and cycle routes.
2. Ensure that the whole workforce are skilled and competent at raising and discussing healthy weight.
3. Utilise change4life brand and campaign material to encourage families to eat less and be more active.
4. Promote healthy food choices particularly around nutrition, weaning and breastfeeding. Healthy menu choices in schools is a key example of this.
5. Encourage participation in physical activity initiatives such as Smile for a Mile initiative.
6. Use the Starting Well action plan within the Eat Well be Active framework to promote greater opportunities for residents to make healthier choices.
7. Commission appropriate weight management services.

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\(^1\) Childhood obesity: A plan for Action, 2016, Department of Health
\(^2\) Health matters: Obesity and the food environment, 2017, Public Health England