

# Start Well

## Healthy Weight

### Introduction

Childhood overweight and obesity is one of the greatest public health challenges facing the UK population. Childhood obesity is a significant risk factor for poor physical and mental health, impacting children in the short term and into adulthood. The causes of childhood obesity are multiple and complex and tackling it requires a whole system approach.

Childhood obesity is not caused by one distinct factor but a number of wide-ranging factors all combining to increase risk of obesity, these include: food environment, food consumption, socioeconomic factors, early and individual factors, physical activity, and the physical environment.

Significant inequalities in childhood obesity and overweight exist in the UK by gender, ethnicity, socio economic status, geography, and disability. For example, in England (2020-21), for children in Year 6 the prevalence of overweight and obesity in the most deprived decile was 49.2% which is significantly higher than those living in the least deprived decile at 28.0%<sup>1</sup>. There are however data quality issues with this measurement due to disruptions caused by the COVID-19 pandemic. This meant that a lower proportion of children were actually measured with areas given a minimum target of 10% of reception and year 6 pupils. Not all areas were able to achieve high participation given the school closures.

In England 2020-21, the prevalence of overweight children in reception (including obese) was 38.8% for children from a white ethnic group, to compare the prevalence among children from a black ethnic group was higher at 52.4% which is significantly higher<sup>2</sup>.

National 2021-22 data shows a decrease in childhood obesity prevalence compared to 2020-21. However, prevalence remains higher in comparison to the pre-pandemic period<sup>3</sup>.

### Prevalence

The National Child Measurement Programme was established in 2005 and involves measuring the height and weight of Reception (4-5 year olds) and Year 6 (10-11 year olds) children at state-maintained schools, including academies. Due to the pandemic, the 2019/20 NCMP data is the last year which was not disrupted by COVID, therefore mainly used below. Figure 1 and Figure 2 below shows around 1 in 11 children in Reception are obese (including severely obese) in Merton, rising to 1 in 5 children in Year 6.

Looking at both overweight and obesity (excess weight), data shows that nearly 1 in 5, or 400 children aged 4-5 years were overweight or living with obesity and just over 1 in 3, or 680 children aged 10-11 years in Merton were overweight or living with obesity, an increase of 17%<sup>4</sup>. By the time young people reach adulthood this increases further, with 1 in 2 adults in Merton classified as overweight or obese (see further details in Live Well section on Risk factors: overweight and obesity, healthy food and physical activity).

Figure 1: Prevalence (%) of BMI categories for children in reception in Merton, including London and England comparisons, 2019/20. Source: NHS Digital, National Child Measurement Programme, 2019/20<sup>5</sup>.

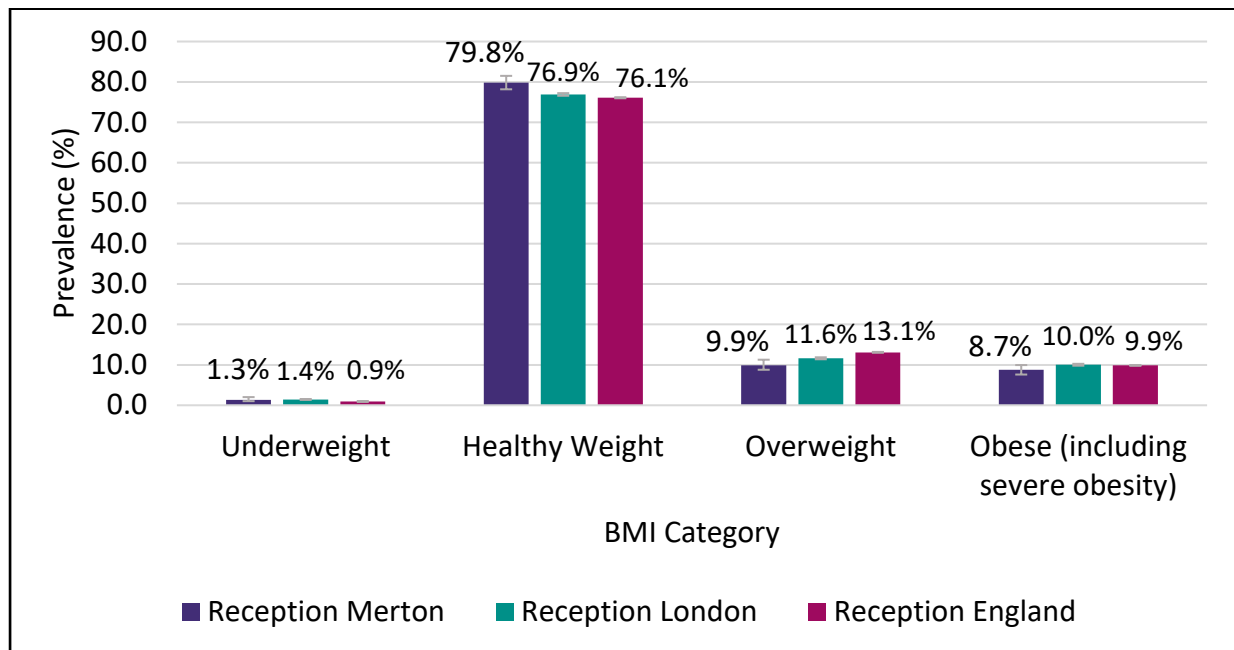
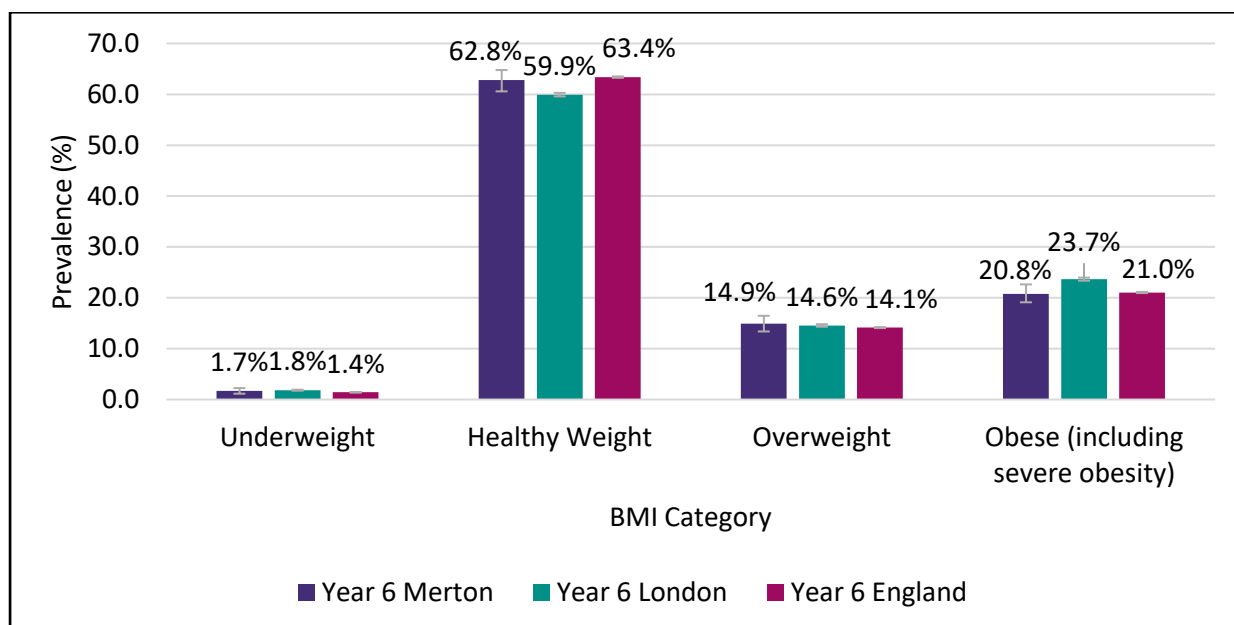


Figure 2: Prevalence (%) of BMI categories for children in Year 6 in Merton, including London and England comparisons, 2019/20. Source: NHS Digital, National Child Measurement Programme, 2019/20<sup>6</sup>.



The pandemic has had a negative impact on children's weight and resulted in an increase in overweight and obesity. In a systematic review and meta-analysis of 22 international longitudinal studies that included 14,216 children 18 years and younger, pooled estimates revealed a decrease of 17 minutes per day in children's moderate-to-vigorous physical activity from pre-pandemic to during the COVID-19 pandemic<sup>7</sup>.

National data for 2020-21 shows the highest annual rise in obesity levels since measurements began in 2006/07. The prevalence of obesity in Reception during 2020-21 in London is among the highest in comparison to other England regions at 15.3%, an increase from 2019/20 at 10.0%<sup>8</sup>. In comparison, the England prevalence was 14.4% in 2020-21, this is therefore significantly lower than London. Year 6 obesity rates in London rose 6.3 percentage points to 30%, which is amongst the highest of all England regions, and significantly higher than England's at 25.5%. Prevalence of overweight and obesity combined (excess weight) in Year 6 was 45.2% an increase from 38.2% in 2019/20 for London. To compare, London was significantly higher than England during 2020-21 at 40.9%<sup>9</sup>.

Local data has not been published for 2020-21 because, due to COVID, it was based on a smaller 20% sample in Merton. However, this sample data indicates that rates of overweight and obesity in Merton are higher than London for Reception (4-5 year olds) and similar to London for Year 6 (10-11 year olds). Merton data has not been published for 2021-22.

The latest provisional national data (based on a mid-year snapshot) for 2021-22 show decreases in the proportions of children who are overweight (including obesity), obese and severely obese compared to 2020-21. Decreases are seen in both Reception and Year 6, with Reception seeing the biggest relative decrease. The prevalence of children in year 6 considered overweight or obese in England was 37.8%, however we also find prevalence was higher for males at 40.9% in comparison to females at 34.6%, a similar trend to 2020-21. During the same period, for children in reception, prevalence of overweight and obesity was 22.9%, this was higher for males at 23.2% compared to 22.5% for females<sup>10</sup>.

### Geographical Differences

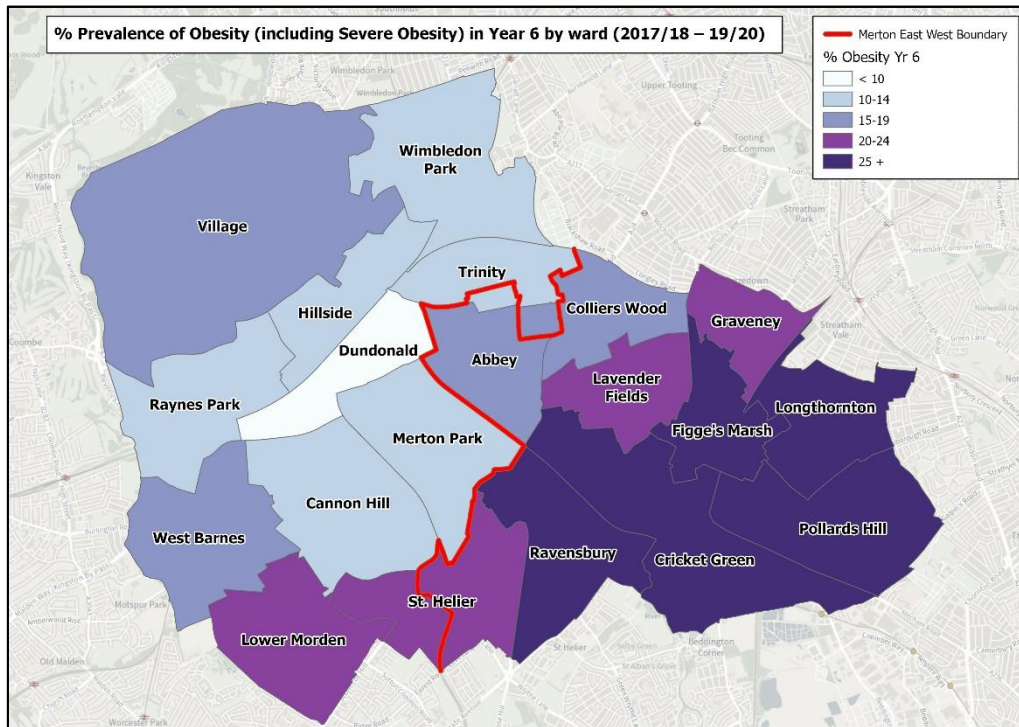
Merton compared to its neighbouring South West London boroughs shows prevalence of obesity in Year 6 children (2019/20) to be significantly lower than the prevalence reported in Croydon, yet significantly higher than Richmond<sup>11</sup>. Merton's prevalence is similar to Wandsworth, Kingston and Sutton. (See Figure 3 below).

Figure 3: Prevalence (%) of Year 6 obesity 2019/20, Merton compared to South West London boroughs, including London and England comparisons. Source: OHID, Public Health Profiles<sup>12</sup>.



Figure 4 below shows the differences in obesity prevalence between East and West Merton wards with prevalence of obesity higher in East Merton wards in comparison to West Merton wards which is a similar trend for Reception<sup>13</sup>. The exception is Lower Morden which show higher rates although located in west Merton and St Heliers ward which straddles both east and west Merton. No data is presented for Dundonald ward due to small numbers.

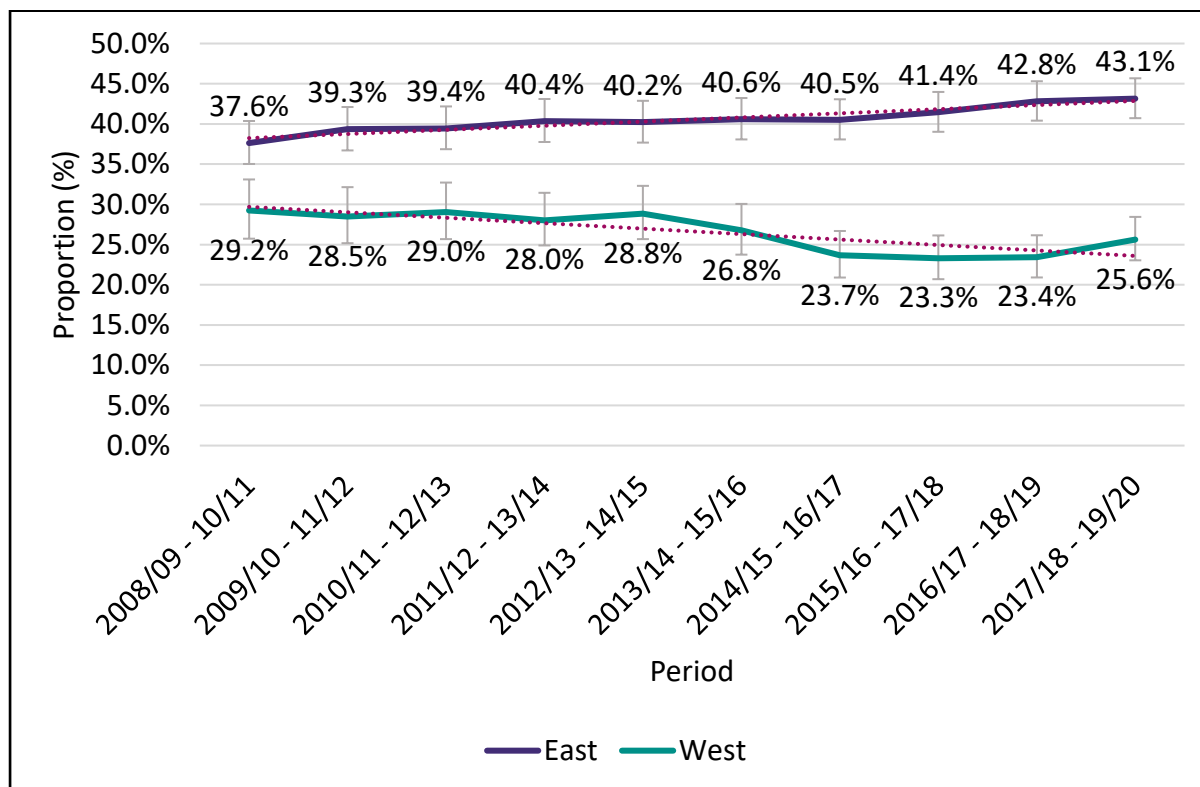
Figure 4: Prevalence of obesity (including severe obesity) in Year 6 (2017-18 – 2019/20) by ward<sup>14</sup>.



### Obesity trends over time by East and West Merton

Figure 5 below shows the trend in prevalence of overweight (including obesity) in Year 6 by East and West Merton over time. It shows the gap in obesity is widening with rates decreasing in the West but increasing in the East<sup>15</sup>. Rates between East and West Merton for each period are calculated by using true numerators and denominators for the 30% least deprived wards in Merton and the 30% most deprived wards. This can be considered a proxy for the East/West difference. This graph does not include the COVID pandemic period. The latest 3-year data available (2017-18 to 2019/20) shows a gap of 17.5 percentage points between East and West Merton, with an overall widening trend being seen<sup>16</sup>.

Figure 5: Prevalence of overweight (including obesity) in Year 6 children by 30% Most Deprived (East Merton) and 30% Least Deprived (West Merton), 2008/09 - 2019/20. Source: OHID, Public Health Profiles<sup>17</sup>.



### Deprivation and Ethnicity

In Merton and nationally, there is an association between deprivation and childhood obesity where children in the most deprived areas, tend to have significantly higher obesity rates than those in the least deprived areas. In Merton, obesity prevalence amongst the most deprived children in reception aged 4 to 5 years old was 12.5% between 2015/16 – 19/20 which is significantly higher than children in the least deprived areas at 4.7%<sup>18</sup>. Similarly, for those in year 6 aged between 10 – 11 years old, obesity prevalence in the most deprived areas was 28.4% which is significantly higher than for those from the least deprived areas at 10.8%<sup>19</sup>.

In Merton Reception classes, Black children (15.3%) are significantly more likely to have higher obesity rates compared to those from White (6.6%) and Asian (8.4%) ethnic groups. In Year 6, Black (30.1%) and Asian (24.3%) children are significantly more likely to have higher obesity rates than those from White ethnic group (16.2%)<sup>20</sup>.

### Impact of Living with Overweight and Obesity on Health and Wellbeing

Childhood obesity increases the risk of developing health conditions including asthma, type 2 diabetes and cardiovascular risk factors during childhood. It also increases the risk of long-term chronic conditions in adulthood and can lead to premature death. Obesity affects social and emotional wellbeing, with an increase in children experiencing low self-esteem,

anxiety and depression. This may lead to lower levels of educational attainment which can limit employment opportunities as adults.

A lack of physical activity can result in an increase in overweight and obesity. Physical activity is associated with numerous physical and mental health benefits for children, including muscle and bone strength, and quality of sleep, and there is evidence that physical activity and participating in organised sports and afterschool clubs is linked to improved academic performance. In Merton (2018/19), the proportion of physically active children and young people was 49.6%, the London value was 46.1% whilst the England value was 46.8%. This indicated that about half (50.4%) of children and young people aged 5-16 years in Merton are not physically active enough, equal to 16,326 residents<sup>21</sup>.

Overweight and obesity are only one aspect of healthy weight in childhood. Eating disorders and disordered eating can have a big impact on child health. These are discussed in more detail in the Start Well/Mental Health section. Since the COVID-19 pandemic, poorer mental health and wellbeing have been reported in children and young people, particularly those in care or disadvantaged financially<sup>22</sup>. Poor mental health has a marked negative effect on obesity. There has been increases nationally in referrals to child and adolescent mental health and eating disorder services during the pandemic<sup>23</sup>, this data is presented in more detail in the Start Well mental health section. The pandemic has worsened a number of important risk factors for eating disorders and has also caused a number of more complex impacts that may have contributed to disordered eating behaviour. For example, fewer opportunities to exercise during lockdowns, loss of usual routines, isolation and anxiety, disruptions to organised sport and other physical activities and disruptions in accessing face-to-face support services.

Stigma associated with obesity is also associated with significant physiological and psychological consequences. Obesity stigma can be particularly severe for children and young people and can also lead to disordered eating, avoidance of physical activity and avoidance of support. The Young resident's survey in Merton showed that over a third of young residents worried about their mental health during lockdown<sup>24</sup>. Feeling bored and isolated, they spent a lot more time on screens during lockdown, with habits that might continue and additionally different groups are disproportionately impacted by food poverty which is an increasing challenge for families.

### Service User and Resident Views

There is emerging evidence that stay-at-home guidance, the move to online education and closures of leisure facilities had disrupted children's routines leading to negative impacts on sleep, nutrition and physical activity levels. Engagement work in London indicates that some young people were leaving the house less than once a week at the start of the pandemic, with negative impacts on physical activity as well as young people's mental health<sup>25</sup>.

For further information:

- 1) CYP Mental Health
- 2) Healthy Place

## References

---

- <sup>1</sup> National Child Measurement Programme, England 2020-21 School Year. NHS Digital; 2021 [cited 5 October 2022]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2020-21-school-year#resources>
- <sup>2</sup> National Child Measurement Programme, England 2020-21 School Year. NHS Digital; 2021 [cited 5 October 2022]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2020-21-school-year#resources>
- <sup>3</sup> National Child Measurement Programme, England, Provisional 2021-22 School Year Outputs. NHS Digital; 2022 [cited 5 October 2022]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/england-provisional-2021-22-school-year-outputs#resources>
- <sup>4</sup> National Child Measurement Programme, England 2019/20 School Year. NHS Digital; 2020 [cited 5 October 2022]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2019-20-school-year#resources>
- <sup>5</sup> National Child Measurement Programme, England 2019/20 School Year. NHS Digital; 2020 [cited 5 October 2022]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2019-20-school-year#resources>
- <sup>6</sup> National Child Measurement Programme, England 2019/20 School Year. NHS Digital; 2020 [cited 5 October 2022]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2019-20-school-year#resources>
- <sup>7</sup> Neville RD, Lakes KD, Hopkins WG, Tarantino G, Draper CE, Beck R, et al. Global changes in child and adolescent physical activity during the COVID-19 pandemic. *JAMA Pediatrics*. 2022;176(9):886–94. Available from: <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2794075>
- <sup>8</sup> National Child Measurement Programme, England 2020-21 School Year. NHS Digital; 2021 [cited 5 October 2022]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2020-21-school-year#resources>
- <sup>9</sup> National Child Measurement Programme, England 2020-21 School Year. NHS Digital; 2021 [cited 5 October 2022]. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2020-21-school-year#resources>
- <sup>10</sup> National Child Measurement Programme, England, Provisional 2021-22 School Year Outputs. NHS Digital; 2022 [cited 5 October 2022]. Available from:



---

<https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/england-provisional-2021-22-school-year-outputs#resources>

<sup>11</sup> Office for Health Improvement and Disparities. [Internet]. Public health profiles. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/search/obesity#page/4/gid/1/pat/6/par/E12000007/ati/402/are/E09000024/iid/90323/age/201/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1/page-options/car-do-0>

<sup>12</sup> Office for Health Improvement and Disparities. [Internet]. Public health profiles. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/search/obesity#page/4/gid/1/pat/6/par/E12000007/ati/402/are/E09000024/iid/90323/age/201/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1/page-options/car-do-0>

<sup>13</sup> Office for Health Improvement and Disparities. [Internet]. Local Health - Small Area Public Health Data. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/profile/local-health/data#page/3/qid/1938133183/pat/401/par/E09000024/ati/8/are/E05000455/iid/93108/age/201/sex/4/cat/-1/ctp/-1/yrr/3/cid/4/tbm/1/page-options/car-do-0>

<sup>14</sup> Office for Health Improvement and Disparities. [Internet]. Local Health - Small Area Public Health Data. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/profile/local-health/data#page/3/qid/1938133183/pat/401/par/E09000024/ati/8/are/E05000455/iid/93108/age/201/sex/4/cat/-1/ctp/-1/yrr/3/cid/4/tbm/1/page-options/car-do-0>

<sup>15</sup> Office for Health Improvement and Disparities. [Internet]. Public health profiles. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/search/obesity#page/4/gid/1938133183/pat/401/ati/8/are/E05000474/iid/93108/age/201/sex/4/cat/-1/ctp/-1/yrr/3/cid/4/tbm/1/page-options/car-do-0>

<sup>16</sup> Office for Health Improvement and Disparities. [Internet]. Public health profiles. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/search/obesity#page/4/gid/1938133183/pat/401/ati/8/are/E05000474/iid/93108/age/201/sex/4/cat/-1/ctp/-1/yrr/3/cid/4/tbm/1/page-options/car-do-0>

<sup>17</sup> Office for Health Improvement and Disparities. [Internet]. Public health profiles. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/search/obesity#page/4/gid/1938133183/pat/401/ati/8/are/E05000474/iid/93108/age/201/sex/4/cat/-1/ctp/-1/yrr/3/cid/4/tbm/1/page-options/car-do-0>

<sup>18</sup> Office for Health Improvement and Disparities. [Internet]. Obesity Profile. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/profile/national-child-measurement-programme/data#page/13/gid/8000011/ati/302/cid/4/tbm/1>

---

<sup>19</sup> Office for Health Improvement and Disparities. [Internet]. Obesity Profile. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/profile/national-child-measurement-programme/data#page/13/gid/8000011/ati/302/cid/4/tbm/1>

<sup>20</sup> Office for Health Improvement and Disparities. [Internet]. Obesity Profile. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/profile/national-child-measurement-programme/data#page/13/gid/8000011/ati/302/cid/4/tbm/1>

<sup>21</sup> Office for Health Improvement and Disparities. [Internet]. Public health profiles. Fingertips; [cited 5 October 2022]. Available from: <https://fingertips.phe.org.uk/search/physical/page/4/gid/1/pat/6/ati/402/are/E09000024/iid/93570/age/246/sex/4/cat/-1/ctp/-1/yr/1/cid/4/tbm/1>.

<sup>22</sup> The impact of the COVID-19 pandemic on the mental health of children and young people in London [Internet]. London Assembly Health Committee; 2021. [cited 20 October 2022]. Available from: [https://www.london.gov.uk/sites/default/files/the\\_mental\\_health\\_of\\_children\\_and\\_young\\_people\\_-\\_final\\_clean.pdf](https://www.london.gov.uk/sites/default/files/the_mental_health_of_children_and_young_people_-_final_clean.pdf)

<sup>23</sup> NHS treating record number of young people for eating disorders [Internet]. NHS England; 2022. [cited 20 October 2022]. Available from: <https://www.england.nhs.uk/2022/03/nhs-treating-record-number-of-young-people-for-eating-disorders/>

<sup>24</sup> Survey: Impact of covid-19 on young people in Merton, 2021 [Internet]. Merton Council. 2021 [cited 5 October 2022]. Available from: <https://www.merton.gov.uk/council-and-local-democracy/get-involved/young-residents-survey-2021>

<sup>25</sup> Survey: Impact of covid-19 on young people in Merton, 2021 [Internet]. Merton Council. 2021 [cited 5 October 2022]. Available from: <https://www.merton.gov.uk/council-and-local-democracy/get-involved/young-residents-survey-2021>