

# Theme One: Food and Nutrition as a Determinant of Population Health

Chapter 1A: Population demographics and wider determinants

Chapter 1B: Nutritional epidemiology and excess weight



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# Chapter 1A: Population demographics and wider determinants

This chapter sets the scene for West Sussex, providing information about the size and characteristics of the population and the wider determinants that are the building blocks for health. Population estimates of those with protected characteristics and other groups who may be at increased risk of poorer health are provided, as is an overview of areas of deprivation and estimates of poverty and inequalities. Information about education, employment, and housing and homelessness is also provided.

As well as describing the West Sussex context, this chapter can be referred to when reading the further chapters in this needs assessment. Epidemiological data describing indicators related to food and nutrition is often only available at a national or regional level, with no data available for West Sussex. However, by considering the population estimates and inequalities in West Sussex described below and applying these to national data, we can gain insight into approximate numbers of those who may be at risk of poorer health due to dietary and nutritional factors and how many may therefore benefit from intervention.

## Summary

### Place and population

- West Sussex is a large and predominantly rural county, with a population of around 900,900 people. Most of the population is concentrated along the coast and in several towns.
- Demographically, the county has an older age structure and is less ethnically diverse than the South East and England, although there is variation in the county, particularly in Crawley. The population is projected to increase over time, with most of this growth in older age groups (65+ years).
- Slightly more than a quarter of households contain at least one dependent child (27.0%), equivalent to 101,110 households. Around a fifth of these households are comprised of lone parents and their child(ren), equivalent to 20,510 households.
- Around 16% of West Sussex residents report being disabled, equivalent to 148,900 people. The prevalence of disability is greater with increasing age.

### Wider determinants of health

- West Sussex is relatively affluent overall, although several areas are amongst the 20% most deprived in England, including areas in Arun, Crawley and Worthing.

- Child poverty in all areas of West Sussex is lower than in England, although there is variation within the county, with the highest rate in Crawley. After housing costs, an estimated 44,980 children aged 16 and under were living in relative poverty in West Sussex in 2022/23. Over the last decade, most areas in West Sussex have seen child poverty gradually increase.
- A lower proportion of pupils in West Sussex are known to be eligible for free school meals than in England (24.6%), at 15.7% of pupils in the 2023/24 academic year, equivalent to 18,624 pupils.
- Most West Sussex residents of working age (16-64 years) are economically active (83.3% in 2023/24). Of those who are economically inactive, around 28% are economically inactive due to long-term sickness (around 23,800 people).
- With the exception of Crawley, the proportion of the working-age population claiming out-of-work benefits in West Sussex (3.1% in March 2025) is similar to the South East (3.3%) and lower than England (4.3%). In Crawley, the proportion claiming out-of-work benefits is 4.5%.
- Most West Sussex residents have some level of educational qualifications, although 15.8% of those aged 16 years and over have no qualifications.
- Most households in West Sussex own their own home (69.7%), whilst around 113,720 people rent their homes, either in socially rented properties or privately rented properties.
- Homelessness is an increasing problem in West Sussex and nationally. In 2023/24, there were 3,800 households in West Sussex that were owed a homelessness prevention or relief duty under the Homelessness Reduction Act. The rate of homelessness varies across the county and is highest in Crawley.
- In 2023/24, there were 1,461 households in temporary accommodation arranged by local authorities in West Sussex, nearly half of which had dependent children.

## Population and population change in West Sussex

### Current and projected population

Around 900,900 people live in West Sussex (2023 mid-year estimate)<sup>1</sup>.

In the ten years since the 2011 Census, the West Sussex population has increased by 9.2%, which is a greater increase than in the South East region (7.6%) and England (7.0%). The population is projected to continue increasing over time (Figure 1), growing by an additional 39,300 people within the next ten years (2025 to 2034). During this period, the child population (0-15 years) is projected to fall by approximately 5% whilst the older age group (aged 65+ years) is projected to increase by approximately 21%<sup>2</sup>.

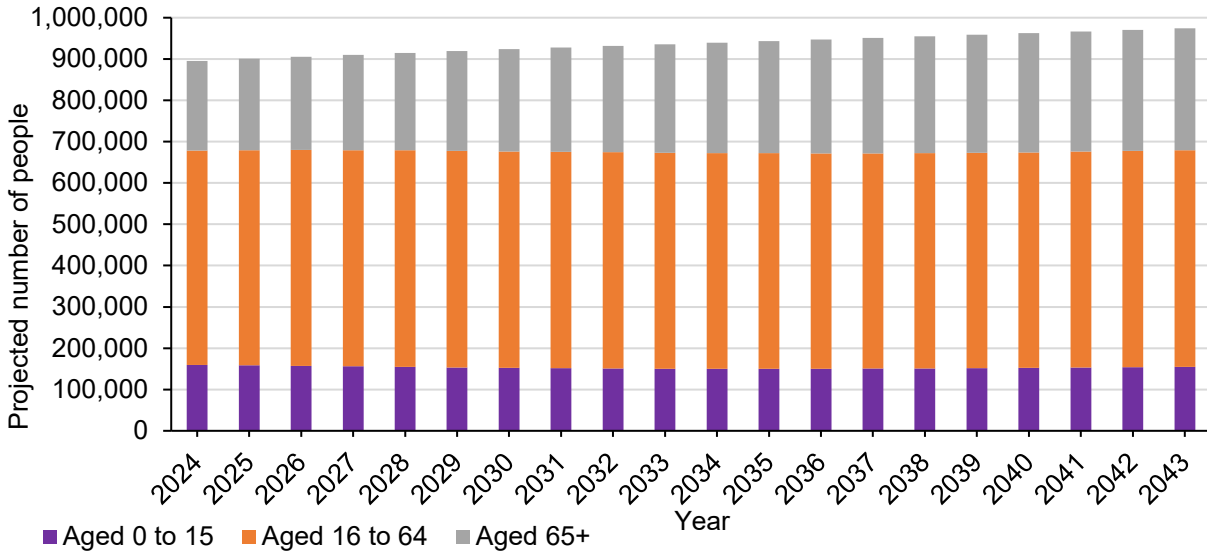


Figure 1. Projected population of West Sussex from 2024 to 2043 (2018-based projection). Data source: Office for National Statistics.

## Components of population change

### Births

In 2023, there were 7,768 births to West Sussex residents, the lowest number recorded in the last ten years. There has been a downward trend in the number of births over the last ten years, both in West Sussex and nationally<sup>3</sup> (Figure 2).

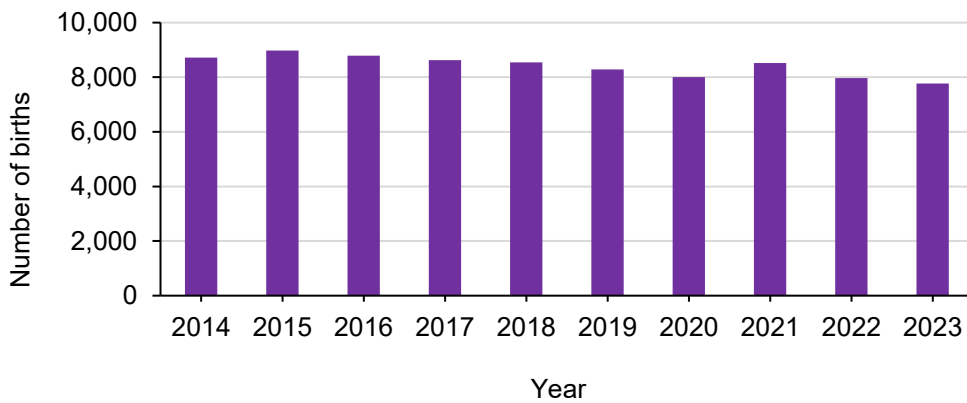


Figure 2. Number of live births in West Sussex, 2014-2023. Data source: Office for National Statistics.

## Deaths

In 2023, there were 9,972 deaths of West Sussex residents. The number of deaths has generally trended upward over the last 10 years, related to an increased and ageing population (although recorded deaths were slightly higher in 2020 and 2021, during the height of the COVID-19 pandemic, than in 2023)<sup>4</sup> – Figure 3.

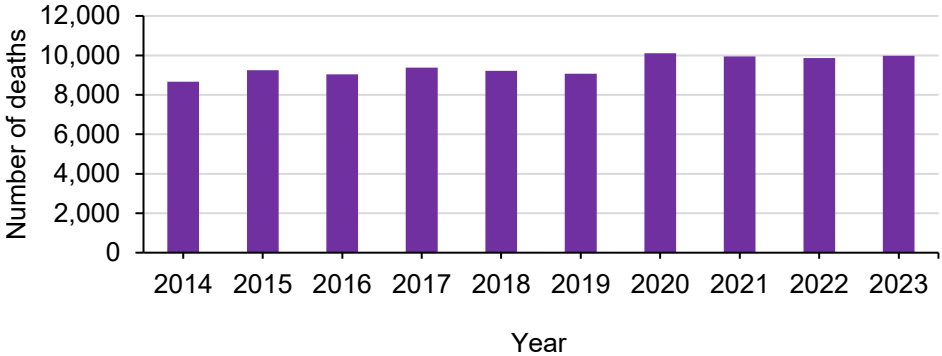


Figure 3. Number of deaths in West Sussex, 2014-2023. Data source: Office for National Statistics.

## Migration

From mid-2022 to mid-2023, West Sussex had a net population gain from other UK areas (i.e., UK internal migration) of approximately 5,370 people and net gain from outside of the UK (i.e., international migration) of approximately 5,115 people. All district and borough areas in West Sussex have experienced net inward migration<sup>5</sup>.

## Population change

Given that there have been more deaths than births in West Sussex over the last decade, population growth in the county has been driven by net inward migration. Most district and borough areas have experienced natural decline (i.e., more deaths than births), with the exception of Crawley. In 2023, Crawley experienced both positive natural change (633 more births than deaths) and net inward migration. Mid Sussex also differs from the rest of the county, as although net inward migration drove population increase, the number of births nearly matched the number of deaths.

## Households

Most West Sussex residents live in households, although a small percentage of the population live in communal establishments, including care homes and boarding schools. In West Sussex overall, around 7,400 people live in a care home, with particularly high numbers living in care homes in Arun and Worthing (2,013 and 1,447 residents, respectively)<sup>6</sup>.

Table 1. West Sussex residents living in communal establishments. Data source: Census 2021.

	Adur	Arun	Chichester	Crawley	Horsham	Mid Sussex	Worthing	West Sussex
<b>Medical and care communal establishments</b>								
Care homes	396	2,013	1,029	292	1,094	1,114	1,474	7,413
Hospitals	0	6	89	2	0	17	83	198
Children's homes	0	12	6	14	25	7	9	70
Other medical or care establishment	0	50	122	19	10	33	0	233
<b>Other communal establishments</b>								
Education	291	266	1,428	0	1,276	705	0	3,966
Defence	0	0	946	0	0	0	0	946
Prison, probation or detention centres	0	411	0	105	0	0	0	516
Staff or worker accommodation or Other	5	395	63	6	7	38	46	562
Holiday, travel and other temporary accommodation	0	68	28	51	48	19	14	227
Religious	0	33	24	0	27	9	4	97

## Equality Act Protected Characteristics

The Equality Act 2010 sets out the personal characteristics that are protected by the law<sup>7</sup>. There are nine protected characteristics against which it is illegal to discriminate. These are listed in

Table 2.

The Census, undertaken in 2021, provides the most up-to-date and comprehensive picture for most of these characteristics<sup>8</sup>. Census 2021 data are provided for each of these characteristics below, with the exception of age and sex data, for which mid-year 2023 estimates<sup>9</sup> are provided.

Table 2. Personal characteristics protected under the Equality Act 2010. Source: Equality and Human Rights Commission.

<b>Protected characteristic</b>	<b>Description</b>
Age	A person belonging to a particular age (for example 32 year olds) or range of ages (for example 18 to 30 year olds).
Disability	A person has a disability if she or he has a physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities.
Gender reassignment	Where a person undergoes, or proposes to undergo, a process for the purpose of reassigning their sex.
Marriage and civil partnership	<p>Marriage is a union between a man and a woman or between a same-sex couple.</p> <p>Same-sex couples can also have their relationships legally recognised as 'civil partnerships'. Civil partners must not be treated less favourably than married couples (except where permitted by the Equality Act).</p>
Pregnancy and maternity	Pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after the birth and is linked to maternity leave in the employment context. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth, and this includes treating a woman unfavourably because she is breastfeeding.
Race	A race is a group of people defined by their colour, nationality (including citizenship) ethnicity or national

	origins. A racial group can be made up of more than one distinct racial group, such as Black British.
Religion or belief	Religion refers to any religion, including a lack of religion. Belief refers to any religious or philosophical belief and includes a lack of belief. Generally, a belief should affect your life choices or the way you live for it to be included in the definition.
Sex	A man or a woman.
Sexual orientation	Whether a person's sexual attraction is towards their own sex, the opposite sex or to both sexes.

**Age and Sex**

West Sussex overall has an older age structure compared with the South East region and England. In the working age population, there is a lower percentage of early working age adults (aged 19-44 years) and a slightly higher percentage of mid-to-later working age adults (aged 45-65 years). Adults aged 65 years and over account for 23.2% of the population in West Sussex, compared to 19.8% in the South East and 18.7% in England.

Given the county's older age profile and the longer life expectancy of women, there are more female residents than male overall, particularly in age groups 65 years and above (Figure 4). This gap in population size widens with older age, most notably in the 85+ age group: there are around 19,600 female residents aged 85+ years compared with just under 11,900 male residents aged 85+ years.

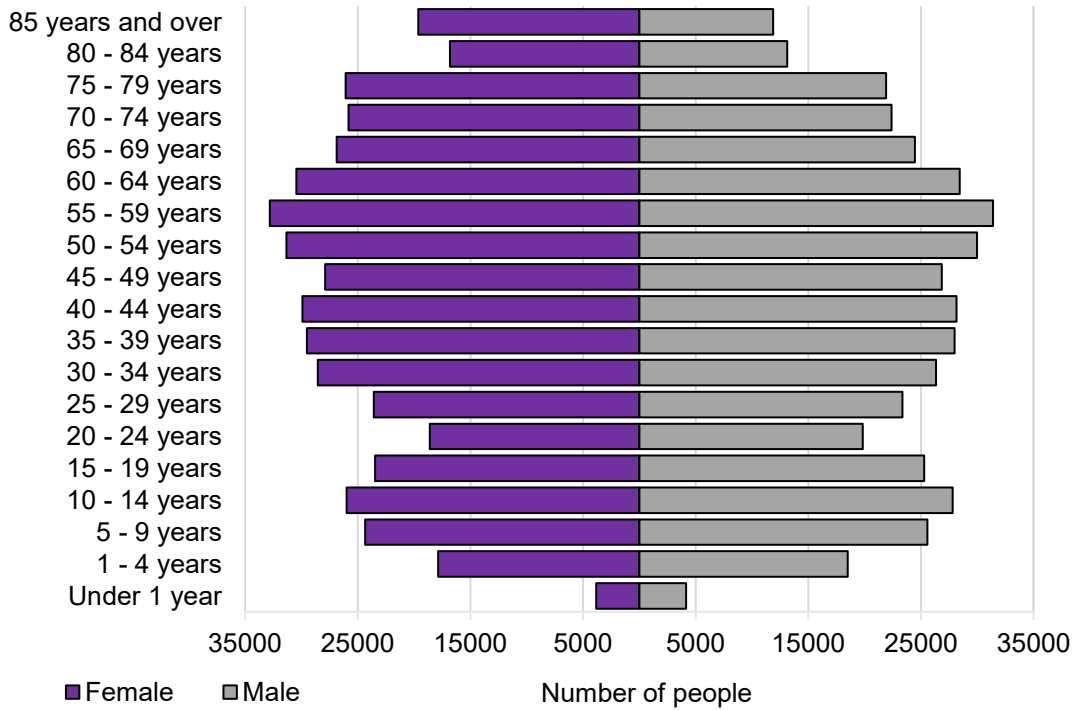


Figure 4. West Sussex age and sex population pyramid, 2023 mid-year population estimate. Data source: Office for National Statistics.

There is some variation in the population across West Sussex, most notably in Crawley, which has a younger age profile compared to the rest of West Sussex (Figure 5). In Crawley, 21.5% of the population is aged 0-15 years and 64.9% of the population is aged 16-64 years (compared to 17.6% and 59.2% in West Sussex overall, respectively).

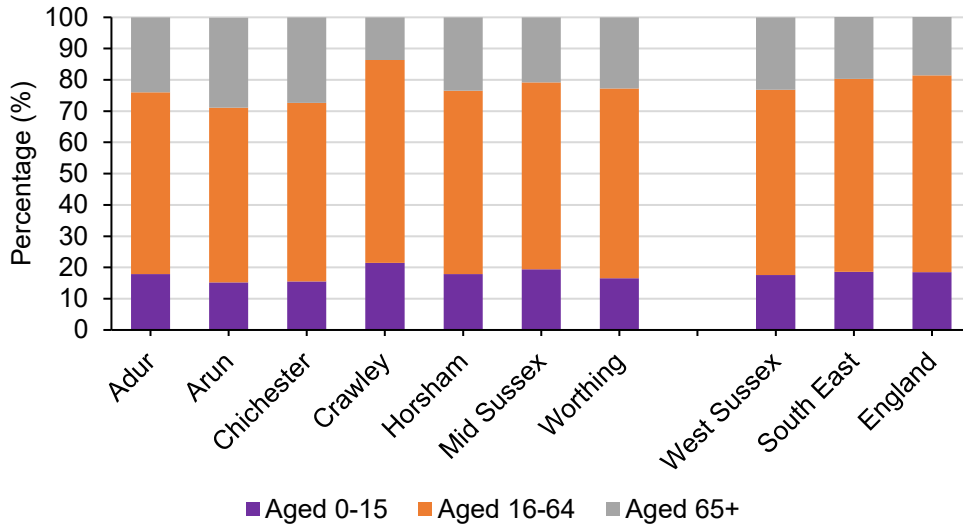


Figure 5. Population estimates across West Sussex local authorities and the South East and England (2023 mid-year estimates). Data source: Office for National Statistics.

Although Crawley has the youngest age structure of the West Sussex local authorities, Mid Sussex has the largest population of children and young people overall, with around 36,200 residents aged 0-18 years. Arun, Crawley and Horsham also have relatively high numbers of children and young people, relative to other areas of West Sussex (Figure 6).

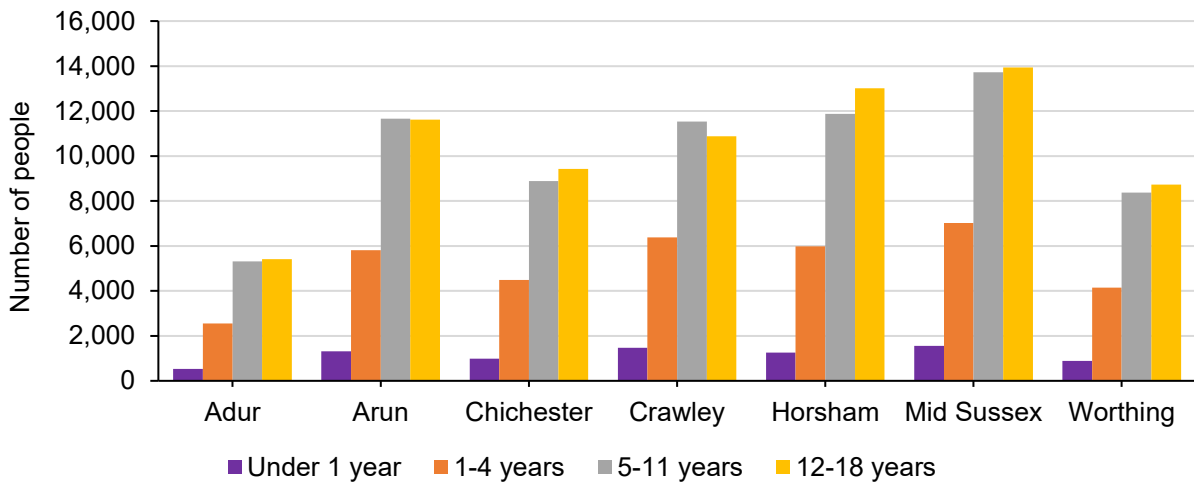


Figure 6. Number of Children and young people (aged 0-18 years) in West Sussex local authorities (2023 mid-year estimates). Data source: Office for National Statistics.

## **Ethnicity, religion and language<sup>10</sup>**

Census 2021 shows that West Sussex is less ethnically diverse than the South East and England, although there is considerable variation within the county. In Crawley, the most ethnically diverse area of West Sussex, over 38% of the population identified as a minority ethnicity (i.e., any ethnicity other than White English, Welsh, Scottish, Northern Irish or British) in the 2021 census. This compares to 15.8% of the West Sussex population overall who identified as a minority ethnicity (Figure 7).

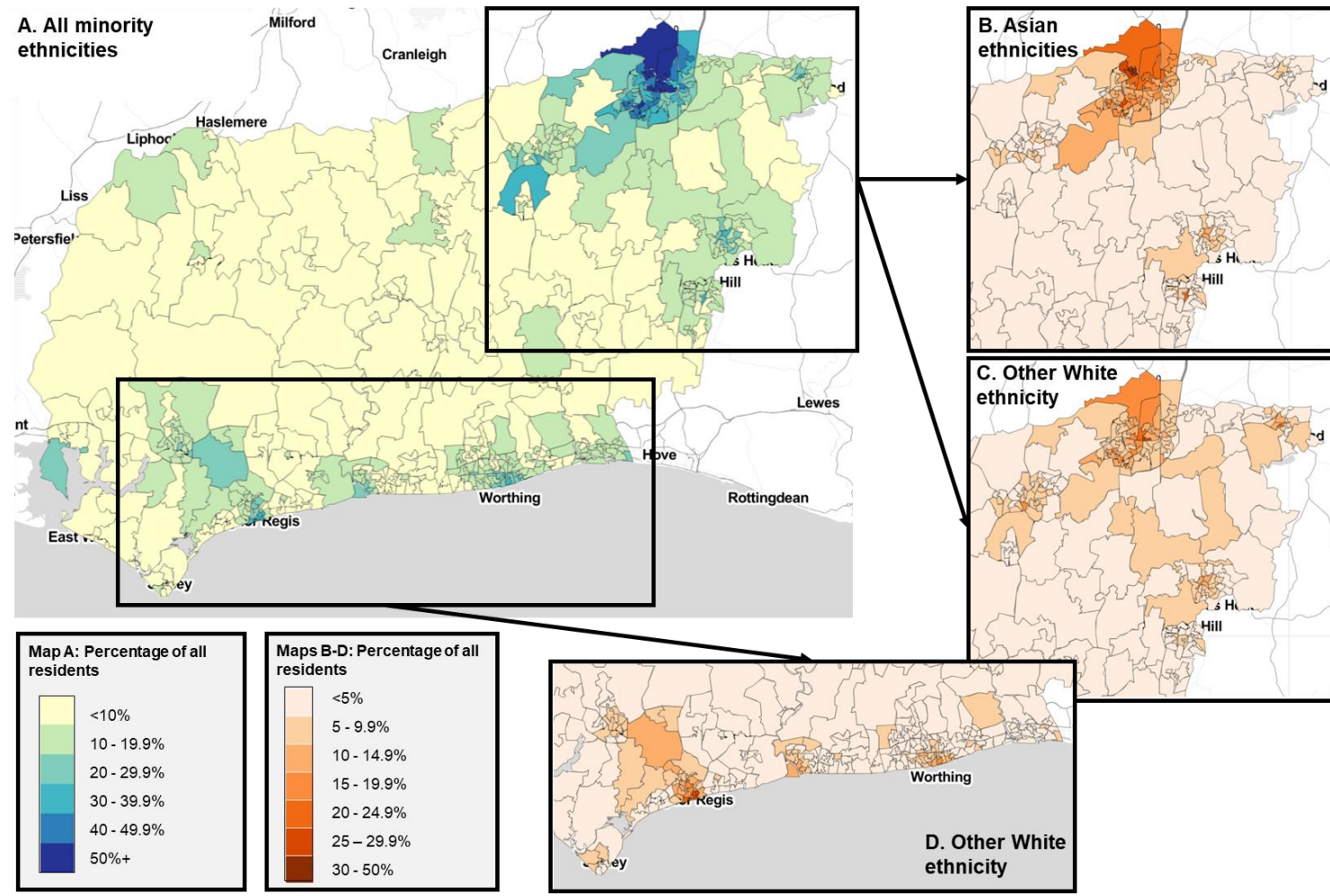


Figure 7. Population density of residents of minority ethnicities in West Sussex lower super output areas (LSOAs) in 2021. Map A shows the proportion of residents who are of any minority ethnicity (i.e., the total of all ethnic groups except for the majority White British group). Maps B-D show the proportion of residents of either Asian or Asian British or Other White ethnicities. NB: the key in map A differs from the key used in maps B-D. Map from West Sussex County Council Public Health and Social Research Unit<sup>11</sup>, using data from Census 2021.

Ethnic minority populations in West Sussex were generally younger than the White British population, with a considerably higher proportion of under 16s and those of working age in most minority ethnicity populations. Around 4-8% of minority ethnic groups were aged 65+, compared to 25.5% in the ageing White British population.

Religious belief was a voluntary question in the 2021 Census. Nearly half of the West Sussex population identified as Christian (48.1%) and 41.1% identified as having no religion. Crawley had the greatest number of people identifying with a religion other than Christianity, with comparatively greater proportions of the population identifying as Muslim (9.7%) and Hindu (5.1%) than other areas in West Sussex.

Main language is not a protected characteristic, although it can represent a barrier to accessing support and services and to participating in activities. As of the 2021 Census:

- Around 49,850 West Sussex residents did not speak English as their main language (representing 5.8% of residents aged 3+).
- Eastern European languages were the most commonly spoken main languages across the county, with around 8,280 Polish and around 5,540 Romanian speakers.
- Of those who did not speak English as their main language, 16.5% reported that they were not able to speak English well or at all, equivalent to 8,215 people.
- Arun and Crawley had the greatest number and proportion of residents unable to speak English well or at all.

## **Disability<sup>12</sup>**

In the 2021 Census, people were asked *"Do you have any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?"*. Of those that answered yes, those that responded *"yes, a little"* or *"yes, a lot"* to the following question *"Do any of your conditions or illnesses reduce your ability to carry out day-to-day activities?"* were classed as disabled.

It should be noted that the 2021 Census was conducted during the COVID-19 pandemic, when a range of restrictions were in place, including restrictions on social gatherings, travel, recreation, workplaces and schools. There is evidence that this affected health, including mental health. The pandemic may also have affected how people viewed and reported their conditions or illnesses.

Around 16% of West Sussex residents reported being disabled in the 2021 Census, equivalent to 148,900 people, with 10% of the population regarding themselves as limited a little by their disability and 6.1% regarding themselves as limited a lot (age-standardised percentages). A similar proportion of people reported being disabled in the South East region and in England (Table 3).

Table 3. Disability in West Sussex, the South East region and England, all ages. Overall numbers (N) and the crude and age-standardised proportions (% and AS %) of the population are presented. Percentages may not sum to 100 due to rounding. Source: Census 2021.

Area	Disabled; limited a little		Disabled; limited a lot		Total disabled	
	N	% (AS %)	N	% (AS %)	N	% (AS %)
<b>Adur</b>	7552	11.7 (11.3)	5025	7.8 (7.2)	12577	19.5 (18.5)
<b>Arun</b>	19331	11.7 (10.8)	13150	8.0 (6.8)	32481	19.7 (17.6)
<b>Chichester</b>	13088	10.5 (9.8)	7888	6.4 (5.4)	20976	16.9 (15.2)
<b>Crawley</b>	10475	8.8 (9.8)	7222	6.1 (7.0)	17697	14.9 (16.8)
<b>Horsham</b>	13923	9.5 (9.1)	7881	5.4 (5.0)	21804	14.9 (14.1)
<b>Mid Sussex</b>	14184	9.3 (9.2)	7879	5.2 (5.0)	22063	14.5 (14.2)
<b>Worthing</b>	12592	11.3 (11.0)	8711	7.8 (7.2)	21303	19.1 (18.2)
<b>West Sussex</b>	91144	10.3 (10.0)	57756	6.5 (6.1)	148900	16.9 (16.0)
<b>South East</b>	915292	9.9 (9.9)	581048	6.3 (6.2)	1496340	16.1 (16.1)
<b>England</b>	5634153	10 (10.2)	4140357	7.3 (7.5)	9774510	17.3 (17.7)

By age (see Figure 88):

- Disability prevalence steadily increased from around age 30 onwards, with steeper increases in age groups above 70 years.
- At younger ages, males had a higher prevalence of disability, but from age 15 onwards, females began to overtake males. This gap in disability status between sexes widened in the older age groups.

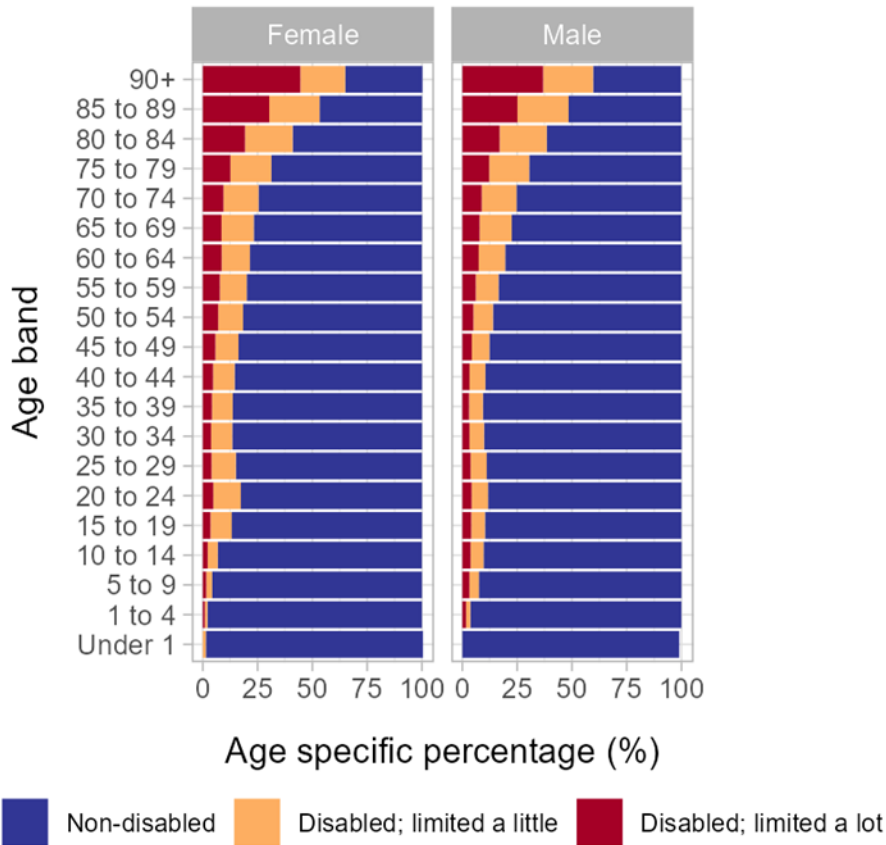


Figure 8. Age-specific proportions of the West Sussex population who reported being disabled in the 2021 Census. Data source: Census 2021.

In England, the 2021 Census shows a clear social gradient in disability status by deprivation, which is steepest for those who are limited a lot by their disability. For example, 13.6% of people living in the most deprived areas in England were limited a lot by their disability, compared to 4.2% in the least deprived areas. A greater percentage of people were disabled at younger ages in the most deprived areas compared to the least deprived areas (Figure 9).

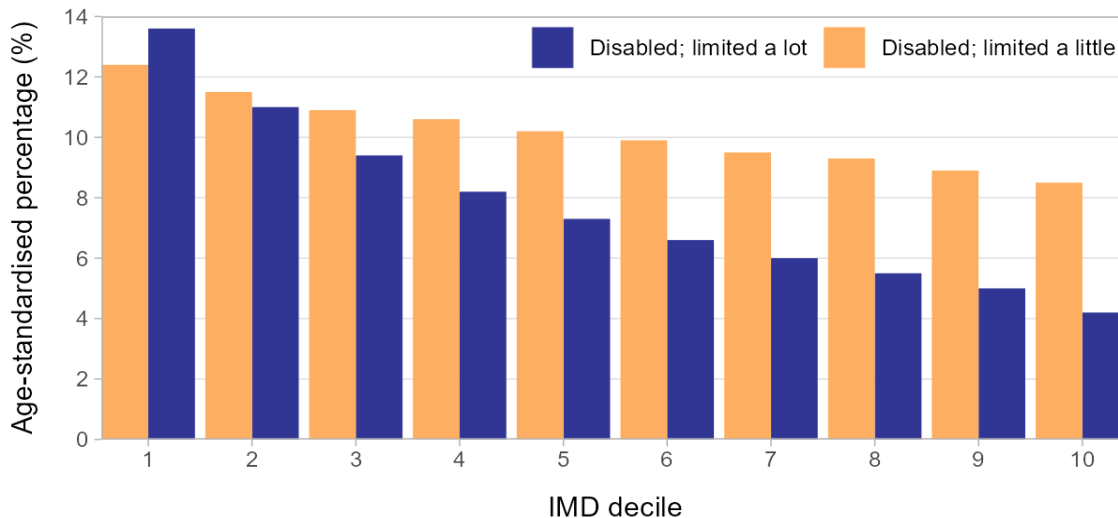


Figure 9. Disability status by area-level deprivation (Indices of Multiple Deprivation (IMD) decile) in England (all ages, age-standardised percentage of population who reported disability in the 2021 Census). Source: Census 2021.

## Gender re-assignment

Gender identity was a voluntary question in the 2021 Census. Approximately 2,700 West Sussex residents aged 16+ years stated that their gender identity was different to their sex registered at birth. Of those who stated a specific identity, a similar number of people in West Sussex identified as a trans man or as a trans woman, and a slightly smaller number stated that they were nonbinary.

## Marriage and civil partnership

As of the 2021 Census, 32.2% of West Sussex residents had never been married or in a civil partnership (whilst 48.4% of residents were married or in a civil partnership). The proportion of West Sussex residents had never been married or in a civil partnership was lower than the South East region (34.8%) and England (37.9%).

## Pregnancy and maternity

There are an estimated 153,630 women of child-bearing age (aged 15-44 years) in West Sussex (2023 mid-year estimate).

In 2023, the total fertility rate in West Sussex was an average of 1.49 children per woman over their lifetime, similar to the national rate. Fertility rates varied across the county, with higher total fertility rates in Crawley and Mid Sussex (1.66 and 1.65 children per woman over their lifetime, respectively). There has been a long-term decline in fertility rates, locally and nationally.

## **Sexual orientation**

Sexual orientation was a voluntary question in the 2021 Census. In West Sussex, 2.9% of residents aged 16+ years stated a sexual orientation other than heterosexual, equivalent to around 21,200 people.

## **Other population groups at risk of poorer health**

In addition to the population groups with characteristics protected by the Equality Act, there are many other sub-groups in the population who may also be at risk of poorer health. The size of the population of these groups in West Sussex is described below or, for some groups (e.g., people experiencing homelessness), in the Wider Determinants section. Much of this data comes from the 2021 Census, alongside some additional official statistics from the Department for Education and Home Office.

## **Children in care and care leavers**

As of March 2024, there were 906 children looked after by the local authority in West Sussex. There were 659 care leavers aged 17-21 years in West Sussex in 2024, most of whom were still in touch with the local authority (97%), and a further 516 young people aged 22-25 years still in contact with the local authority<sup>13</sup>.

## **People providing unpaid care**

As of the 2021 Census, more than 72,800 people (aged 5+ years) in West Sussex stated they provided some level of unpaid care each week. Over 20,300 West Sussex residents reported providing 50 hours or more of care.

## **Young Carers – School Census Data**

In Spring 2023, a category for young carers was added to the annual School Census for state schools<sup>14</sup>. In 2023/24 (the second year of data collection), 0.5% of primary school pupils and 0.9% of secondary school pupils were identified as carers in England overall.

In West Sussex, the percentage is slightly higher for both phases, with 0.7% of primary school pupils and 1.1% of secondary school pupils identified as carers. This represents 471 and 539 primary and secondary school pupils, respectively.

## **Refugees and Asylum Seekers**

Data at a local authority level relating to people seeking asylum or granted refugee status are published by the Home Office<sup>15</sup>. The impact of the situations in Syria, Afghanistan and Ukraine means that quarterly numbers are volatile.

In 2024 (on average across the year), there were 1,145 asylum seekers in receipt of support by a West Sussex local authority. Crawley and Mid Sussex each supported more than a third of this total over the year.

Under the Homes for Ukraine (not including super sponsors) and Afghan Resettlement Programme schemes, 3,132 people were re-settled in West Sussex local authorities in 2024. An additional 1,356 people were accommodated under the Supported Asylum scheme during this period.

## **Military Veterans and Armed Forces Personnel**

As of the 2021 Census, almost 24,500 West Sussex residents have served in the armed forces.

West Sussex also has a military base at Thorney Island, near Chichester, where regiments from the Royal Artillery reside. The resident population of the Thorney Island military base is approximately 1,800.

## **Students**

As of the 2021 Census, there were approximately 38,000 full time students aged 16 years or over in West Sussex. Students account for around 5.2% of the population aged 16+ years, which is lower than the South East (7.0%) and England (7.7%).

West Sussex has one university – the University of Chichester – which has approximately 6,000 students.

## **Wider determinants of health**

### **West Sussex geography**

West Sussex is a large and predominantly rural county of 1,991 square kilometres (769 square miles) (Figure 10). The population is mostly concentrated along the coast and in several towns. Over a third of the population live in a coastal town (38%), which generally have older populations and a higher proportion of the population living in deprived areas<sup>16</sup> (see the Deprivation and inequalities section, below).

The north of the county also includes a New Town (Crawley), which has a younger population, compared to West Sussex overall.

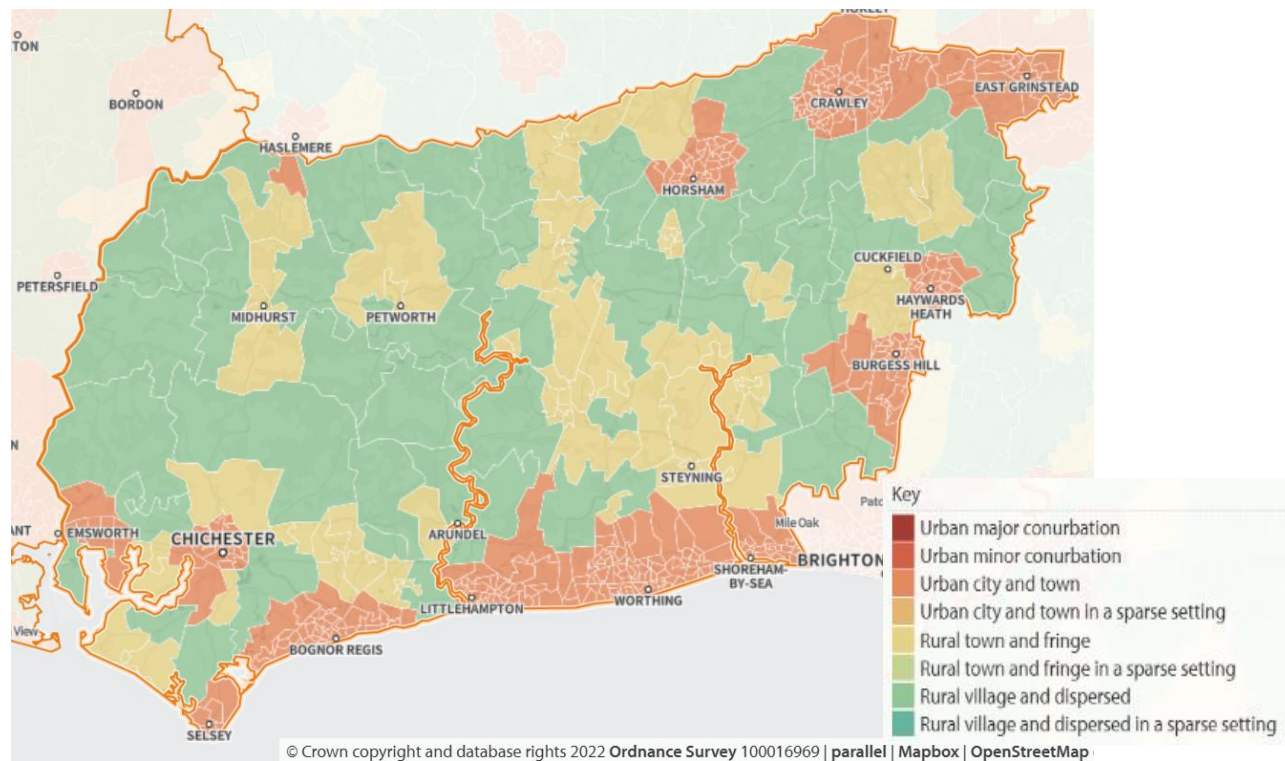


Figure 10. Rural-urban classification of lower super output areas (LSOAs) in West Sussex. Map taken from SHAPE Place Atlas<sup>17</sup>, using ONS 2011 data.

## Deprivation, poverty and inequalities

The Index of Multiple Deprivation 2019<sup>18</sup> measures deprivation levels across England, using seven domains of deprivation: income, employment, education, health, crime, barriers to housing and services, and living environment. Small areas in England are ranked and compared with each other to indicate relative deprivation.

Although West Sussex is relatively affluent overall, several areas are amongst the 20% most deprived in England, including a handful of neighbourhoods in Arun and Crawley that are amongst the 10% most deprived (Figure 11).

Of the West Sussex local authorities, Crawley is the most deprived overall. Most of the Crawley population live in areas ranked within deprivation deciles 3 and 4, although there are also communities living in areas ranked as the least deprived in Crawley.

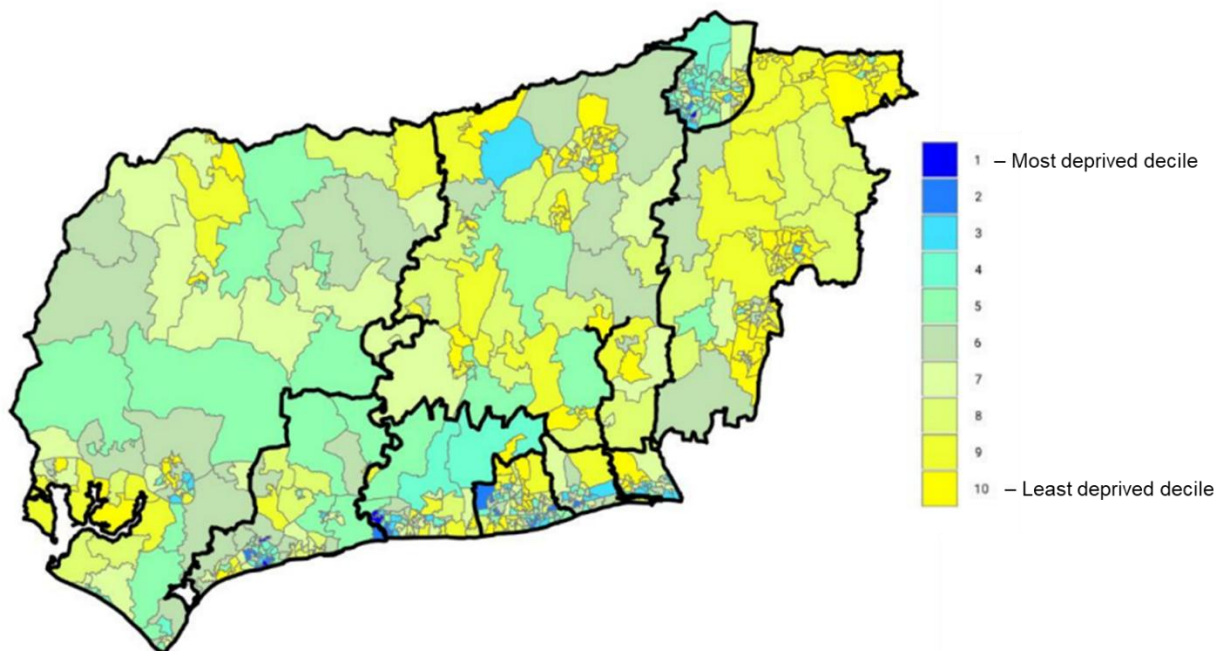


Figure 11. National index of multiple deprivation deciles (IMD 2019) by lower super output area (LSOA) in West Sussex. Map from West Sussex County Council Public Health and Social Research Unit<sup>19</sup>, using data from: Ministry of Housing, Communities and Local Government, 2019.

### Coastal inequalities

Nationally and locally, coastal communities live with greater deprivation and poorer health than their non-coastal neighbours. Across West Sussex coastal towns, around a fifth of residents live in the 30% most deprived areas, compared to around a twentieth in non-coastal areas. Compared to non-coastal towns in West Sussex, a significantly higher proportion of people living in coastal towns are not in good health and experience a higher burden of disease and premature deaths<sup>20</sup>.

### Child poverty

Official statistics from the Department for Work and Pensions (DWP)<sup>21</sup> define low-income families as families that have claimed one or more of Universal Credit, Tax Credits or Housing Benefit at any point in the year. Relative low income is defined as a family in low income in the reference year, whilst absolute low income is a family in low income in the reference year in comparison with incomes in 2010/11.

In West Sussex in 2023/24, for children aged 16 and under, there were:

- 22,250 children living in relative low-income families, before housing costs.
- 18,870 children living in absolute low-income families, before housing costs.

The proportion of children living in relative low-income families (before housing costs) varied across the county, although all areas had lower proportions compared to the UK overall (21.8%).

Child poverty rates fluctuate from year to year, although most areas in West Sussex have seen child poverty gradually increase over the last decade (Figure 12). Crawley in particular has seen a notable rise in children in relative low-income families over time, increasing from 13.3% in 2014/15 to 20.6% in 2023/24.

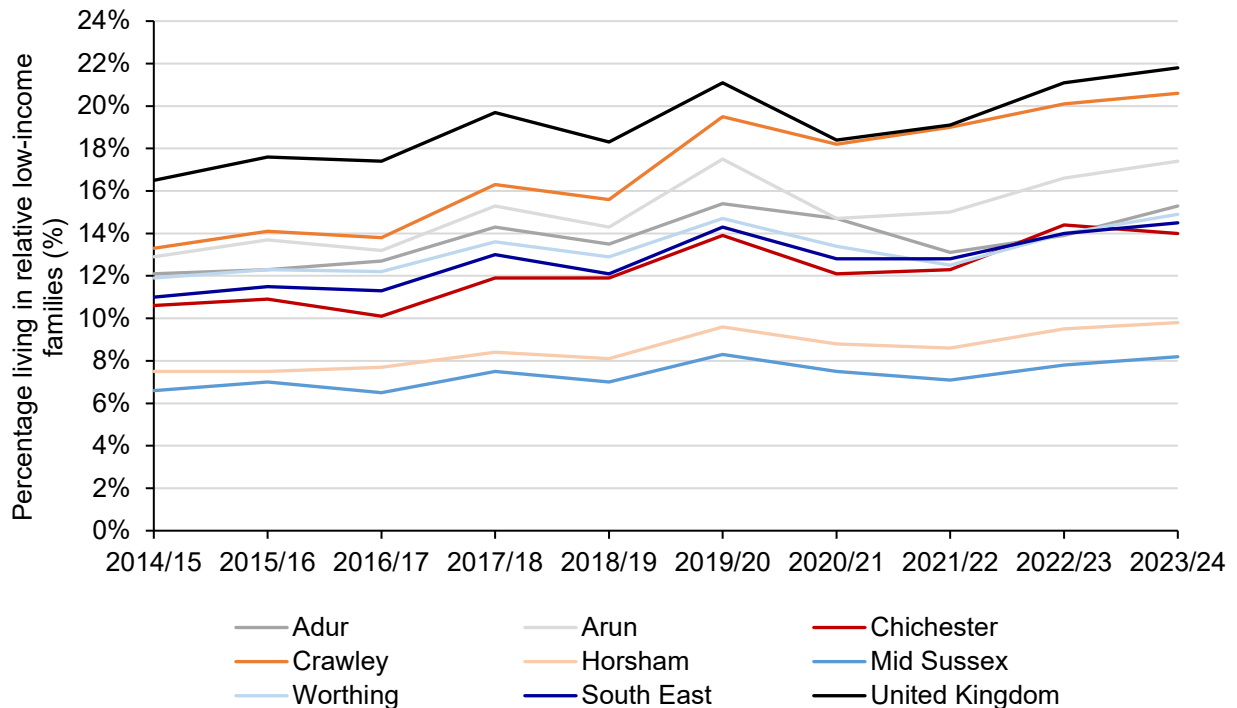


Figure 12. Children living in relative low-income families in West Sussex local authorities, the South East and England, 2014/15 – 2023/24. Data source: Department for Work and Pensions.

Data about child poverty at a local level, after housing costs, are not available from DWP. The charity End Child Poverty, working with the Loughborough University’s Centre for Research in Social Policy, adjust the DWP before housing costs data using administrative and survey data to produce estimates of children (aged 0-16, and aged 16-19 and in full-time education) living in relative low-income families, after housing costs.

After housing costs, an estimated 44,980 children were living in relative poverty in West Sussex in 2022/23. As with relative child poverty before housing costs, there is variation across the county and most areas had a lower or similar percentage of children living in relative poverty after housing costs compared to the UK (30%). Crawley was the exception, with 34.4% of children living in relative poverty after housing costs<sup>22</sup> (Table 4).

Table 4. Children (aged 0-16, and aged 16-19 and in full-time education) living in relative poverty after housing costs. Data source: End Child Poverty and the Centre for Research in Social Policy, Loughborough University.

Area	Number (n)	Percentage (%)
Adur	3,460	25.9%
Arun	8,835	29.8%
Chichester	5,783	25.9%
Crawley	9,728	34.4%
Horsham	5,852	19.1%
Mid Sussex	5,547	16.0%
Worthing	5,777	26.1%
South East	512,360	25%
UK	4,354,000	30%

## Free school meals

Data from the School Census<sup>23</sup> shows that, in the 2023/24 academic year, 15.7% of pupils in West Sussex were known to be eligible for free school meals (FSMs), equivalent to 18,624 pupils. This was lower than the national proportion of pupils who were eligible for FSMs (24.6%) and lower than most of West Sussex's statistically comparable local authorities.

A local analysis of free school meal data has recently been published<sup>24</sup>, with key points from this briefing shown below.

Proportions eligible for FSMs were higher amongst pupils attending alternative provision (59.4%) and special schools (36.6% to 38.3%), although the numbers attending these schools are smaller. Broadly similar proportions of pupils at state-funded primary (15.5%) and secondary schools were eligible for FSMs (14.9%) – Table 5.

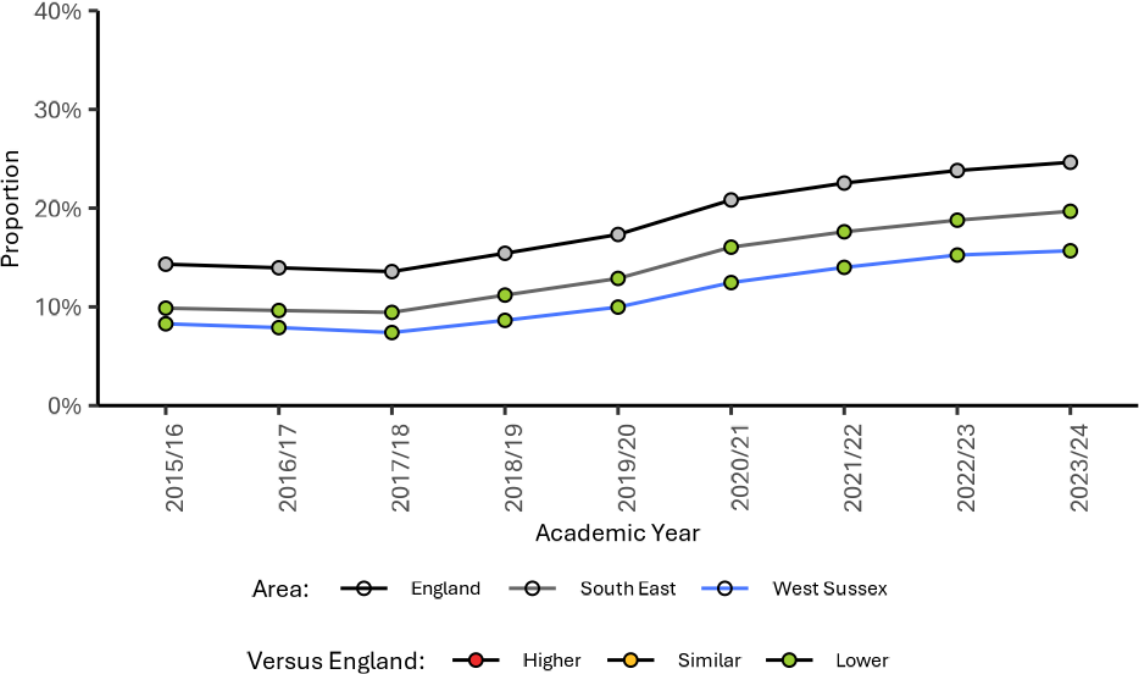
Table 5. Number and percentage of pupils known to be eligible for Free School Meals in West Sussex schools: 2023/24.

School type	Pupils on roll	Known to be eligible for free school meals
State-funded nursery	501	2 (0.4%)
State-funded primary	64,491	9,983 (15.5%)
State-funded secondary	51,313	7,653 (14.9%)
State-funded special school	2,088	799 (38.3%)
Non-maintained special school	183	67 (36.6%)
State-funded AP school	202	120 (59.4%)
Total	118,778	18,624 (15.7%)

Data source: DfE, Explore Education Statistics, Schools, Pupils and their Characteristics 2023/24.

In West Sussex and nationally, the number of pupils eligible for FSMs has increased since 2017/18, although the scale of increase has been smaller in more recent years. Caution is needed in interpreting trends over time, however, due to the transitional protections for FSM eligibility that were put in place during the roll out of Universal Credit, from April 2018 to March 2025. This meant that eligible pupils retained their FSM eligibility during this period, even if their circumstances (i.e., state benefits eligibility) changed. Prior to the pandemic, these transitional protections had been the main driver in the increase in the proportion of pupils eligible for FSMs, as pupils continued to become eligible but fewer pupils stopped being eligible.

Compared to the national rate, the proportion of pupils eligible for FSMs in West Sussex and in the South East region have been consistently lower. The difference between West Sussex and England has widened year on year. The proportion of pupils eligible for FSMs was 6.0 percentage points higher in England than West Sussex in 2015/16, rising to 8.9 percentage points by 2023/24 (Figure 1313).



Note. The continuing year on year increase in the number and rate of pupils eligible for FSM is likely to reflect the continuation of the transitional protections to March 2025. There is an increasing number of pupils who are FSM eligible as pupils flow on to free school meals when becoming eligible, but protections mean pupils do not flow off in similar quantities.

Figure 13. Proportion of all pupils known to be eligible for free school meals in West Sussex, the South East and England, 2015/16 to 2023/24.

Eligibility for free school meals varies by several pupil characteristics:

- Ethnicity – There is wide variation in FSM eligibility by ethnicity, although the numbers of pupils of different ethnic groups are small at county-level, so rates should be viewed with caution. In 2023/24, the rate of White British pupils who were eligible for FSMs was 15.5% in West Sussex. Locally and nationally, rates of eligibility were highest among pupils in the Traveller of Irish heritage ethnic group (59.5% in West Sussex) and Gypsy/Roma ethnic group (54.7% in West Sussex). Rates were also relatively high in pupils of some Black and Mixed ethnic groups in West Sussex (and nationally), including pupils of Mixed: White and Black Caribbean ethnicity (32.0%), Any other Black ethnic background (28.2%), Black Caribbean ethnicity (27.9%), and Mixed: White and Black African ethnicity (26.4%). Rates were lowest among pupils of Indian (2.2%) and Chinese (4.0%) ethnic groups.
- Year group – The highest rates of FSM eligibility are during years of compulsory schooling (reception to year 11). Nationally and locally, the proportion of pupils known to be eligible for FSMs is highest in Year 6 and declines throughout secondary phase. Children attending state-funded nurseries are also eligible for FSMs if they meet the criteria (and attend for ‘full’ days – sessions before and after lunchtime); however, very few nursery-aged children are registered for FSMs in West Sussex. Nationally and locally, there are high rates of FSM eligibility among pupils in year 14. This is a small cohort which includes children retaking the final year of key stage 5.
- Deprivation – Schools in areas that are more deprived generally have higher proportions of FSM eligible pupils. However, the distance between where a pupil lives and where they go to school can vary substantially within the county. This may be particularly true for some settings, such as larger secondary schools (that tend to provide education for wider geographical areas) and special schools.
- Rurality – National data shows a shift in the past decade where children recorded as FSM eligible are more likely to live in a rural area. A crude analysis of FSM eligibility among West Sussex primary schools (2023/24 data) shows a higher rate of FSM eligibility among pupils attending primary schools in urban areas than rural areas (16.1% compared to 12.5%).
- Coastal areas – A higher proportion of pupils attending coastal schools in West Sussex are eligible for FSMs (17.4%), compared with pupils attending non-coastal schools (14.7%)<sup>25</sup>.

More information about free school meals is provided in Chapter 3: School-age children.

## **Older person poverty and benefits**

Data around poverty in older people is less frequently collected than that for children at a local authority level. In 2019, an estimated 22,360 people aged 60+ years were living income-deprived households in West Sussex, equivalent to 9.5% of the older population (aged 60+ years)<sup>26</sup>.

For those of state pension age (66 years), Pension Credit is the main means-tested benefit. Pension Credit has two elements: the Guarantee Element, which provides financial support to bring an older person up to a minimum income level, and the Savings Credit element, which aims to reward people with modest levels of “qualifying income” (such as savings, or a second pension). As of May 2024, there were around 15,000 people aged 66+ years who were claiming pension credit in West Sussex, equivalent to 7.2% of the population aged 66+ years. This proportion of the older population claiming pension credit has remained fairly stable over the past few years<sup>27</sup>.

Although many people enter retirement with relatively good incomes, an analysis by the Fabian Society has identified that a quarter of people aged 60-65-years are living in poverty. This is the highest poverty rate of any adult age group and income disparities in this age group are becoming increasingly large<sup>28</sup>.

## **Fuel poverty**

In West Sussex, 9.3% of all households are estimated to be living in fuel poverty, equivalent to 35,850 households (2022 data). West Sussex is similar to the South East region (9.7% of households) and lower than England (13.1% of households). A household is considered to be fuel-poor if they are living in a property that has an energy efficiency rating of band D or below, and, after householders spend the required amount to heat their home, they are left with a residual income below the official poverty line<sup>29</sup>.

## **Education and employment**

### **Qualification level**

*Census 2021 shows that, of West Sussex residents aged 16 years and over, 15.8% have no qualifications. This proportion is lower compared to England (18.1% with no qualifications), although there is variation across the county. In Adur and Arun, nearly one in five adults have no qualifications, whilst in Mid Sussex, the number of adults with no qualifications is closer to one in ten (*

*Table 6)*<sup>30</sup>.

Table 6. Highest qualification level – number and percentage of population aged 16+ with no qualifications and the highest level of qualification (level 4 and above). Data source: Census 2021.

	No qualifications		Level 4 qualifications or above	
	Number	%	Number	%
<b>Adur</b>	114,595	19.5%	238,010	27.9%
<b>Arun</b>	10,333	19.7%	14,782	26.4%
<b>Chichester</b>	27,534	14.8%	36,839	37.2%
<b>Crawley</b>	15,536	17.8%	38,992	27.5%
<b>Horsham</b>	16,684	12.5%	25,773	37.0%
<b>Mid Sussex</b>	15,074	11.7%	44,615	38.7%
<b>Worthing</b>	14,454	16.2%	47,689	31.7%
<b>West Sussex</b>	14,977	15.8%	29,318	32.7%
<b>South East</b>	8,317,790	15.4%	15,606,458	35.8%
<b>England</b>	1,162,219	18.1%	2,702,048	33.9%

## Economic activity

Of West Sussex residents aged 16-64 years, 83.3% were economically active in 2023/24 (October 2023-September 2024). Of the 16.7% of the population aged 16-64 years who were economically inactive, 28.1% were economically inactive due to long-term sickness (23,800 people). This proportion with long-term sickness is similar to Great Britain (28.2%) but higher than the South East region (22.3%)<sup>31</sup>.

## Income

*Gross disposable household income (GDHI) per head is the amount of money that all individuals in the household sector have available for spending or saving after taxes and receipt of any direct benefits<sup>i</sup>. Of West Sussex local authorities, Crawley had the lowest level of GDHI per head, at £19,881 (in 2022). This was lower than GDHI per head in the South East region and England. GDHI per head was highest in Mid Sussex, Horsham and Chichester, at around £29,000 per head<sup>32</sup> (*

<sup>i</sup> GDHI is a concept that is seen to reflect the “material welfare” of the household sector. The household sector used to calculate GDHI includes residents of all ages (including children and retired people) who are living in both traditional households and in communal establishments.

Table 7).

Table 7. Gross disposable household income (GDHI) per head in West Sussex local authorities, the South East region and England in 2022. Data source: Office for National Statistics.

Area	GDHI per head (£)
Adur	21,774
Arun	23,068
Chichester	29,357
Crawley	19,881
Horsham	29,440
Mid Sussex	28,210
Worthing	23,051
South East	26,058
England	23,338

## Workless households and out-of-work benefits

A household is considered workless where all adults aged 16 or over are either economically inactive or unemployed. In 2023, there were around 40,000 workless households in West Sussex, representing 14.4% of all households. This was similar to the 13.9% of workless households nationally.

Data for out-of-work benefits claimants is frequently updated by the Department for Work and Pensions. In March 2025, there were 16,490 West Sussex residents (aged 16+ years) claiming out-of-work benefits, equivalent to 3.1% of the working age population (aged 16-64 years). This was similar to the South East region (3.3%) and lower than England (4.3%). Across all West Sussex local authorities, the percentage of out-of-work benefits claimants was lower than England, with the exception Crawley (4.5% claiming out-of-work benefits, representing 3,485 people)<sup>33</sup>.

## Housing and tenure

### Households

As of the 2021 census, there were approximately 375,220 households in West Sussex. Of these households, 27.0% contained at least one dependent child (101,105 households), whilst 3.8% contained three or more dependent children

(14,310 households). There were approximately 20,455 households comprised of lone parents with dependent children (5.5% of households)<sup>34</sup>.

There were 57,410 one-person households where the sole resident was aged 66+ years (15.3% of all households) and 44,510 single family households where all residents were aged 66+ years (11.9% of all households)<sup>35</sup>.

## Tenure

As of the 2021 census, most households in West Sussex owned their own home (69.7% of households), either outright or with a mortgage, loan or shared ownership. Around 113,720 people rented their homes, with 41.9% of these households living in socially rented properties and 58.1% living in privately rent properties (or rent-free).

Of households with dependent children, 37.8% lived in rented accommodation, with around 16,740 households with dependent children living in socially rented properties and 21,500 living in privately rented properties<sup>36</sup> (Table 8).

*Table 8. Number and percentage of all households and households with dependent children in West Sussex, by tenure type. Data source: Census 2021.*

	All households	Percentage of households	Households with dependent children	Percentage of households
<b>Owned</b>	261,497	69.7%	62,864	16.8%
Owns outright	142,731	38.0%	8,346	2.2%
Owns with a mortgage or loan or shared ownership	118,766	31.7%	54,518	14.5%
<b>Rented</b>	113,719	30.3%	38,237	10.2%
Social rented	47,611	12.7%	16,735	4.5%
Private rented or lives rent free	66,108	17.6%	21,502	5.7%
<b>West Sussex total</b>	375,216	100.0%	101,101	26.9%

## Homelessness and temporary accommodation

In West Sussex and nationally, homelessness is a growing problem. In recent years, the numbers and rates of households who are owed a statutory duty under the Homelessness Reduction Act or are housed in temporary accommodation have risen substantially, with some areas seeing a much steeper increase than others. In West Sussex, Crawley and Worthing have seen the greatest increases in need for housing support and homelessness provision.

## Homelessness prevention and relief duties

In 2023/24, there were 3,800 households in West Sussex that were owed a homelessness prevention or relief duty under the Homelessness Reduction Act (equivalent to a rate of 9.8 per 1,000 households). The rate of households owed a duty was highest in Crawley, at 18.3 per 1,000 households, and significantly above England (13.4 per 1,000 households) and the South East (11.3 per 1,000 households)<sup>37</sup>.

Additional support needs were highly prevalent in these households who were owed a homelessness prevention or relief duty in West Sussex, ranging from 52% of households owed a duty in Arun to 75% of households owed a duty in Worthing. Having a history of mental health problems and physical ill-health or disability were the most common additional support needs, at 26% and 21% of households owed a duty in West Sussex, respectively<sup>38</sup>.

### **Households in temporary accommodation**

In 2023/24, there were 1,461 households in temporary accommodation (TA) arranged by local authorities (LAs) in West Sussex (equivalent to a rate of 3.8 households per 1,000 households). Nearly half of these households had dependent children (696 households)<sup>39</sup>.

Crawley and Worthing had the highest rates of households living in TA in West Sussex (9.6 per 1,000 households and 7.8 per 1,000 households, respectively), and were both significantly above the rates in England (4.6 per 1,000 households) and the South East (3.4 per 1,000 households)<sup>40</sup>.

### **Rough sleeping**

The annual rough sleeping snapshot estimated that there were 62 people sleeping rough in West Sussex on a single night in autumn 2024. Three-quarters of these people were recorded as rough sleeping in Worthing (17 people), Arun (16 people) and Crawley (14 people)<sup>41</sup>.

## Chapter 1B: Nutritional epidemiology and excess weight

This chapter begins with an overview of the nationally recommended guidelines for a healthy diet, including macronutrients, micronutrients and the Eatwell Guide. We then focus on key indicators that show how well the infant, child and adult populations are meeting these standards and targets for diet and nutrition, including consumption of fruits and vegetables, macronutrients and micronutrients.

In the latter half of the chapter, we focus on one of the most significant outcomes of a poorer diet and nutritional balance: excess weight and obesity. Estimates of the prevalence of excess weight and obesity in the population are provided, as are data describing inequalities in prevalence.

### Summary

#### Diet and nutrition

- The key components of diet which provide us with energy and nutrients are referred to as macronutrients (e.g., protein, carbohydrates and fats) and micronutrients (vitamins and minerals). These are required in different quantities but are equally important in the diet.
- Most people can get all the vitamins and minerals they need from a healthy, balanced diet. However, some vitamin supplements, such as Vitamin D and folic acid, are recommended at a population level.
- Breast milk provides the ideal nutrition for infants in the first stages of life. In West Sussex in 2023/24, 79.7% of babies had breast milk as their first feed, compared to 74.2% in the South East and 71.9% in England. Babies in more deprived areas were less likely to have breast milk as their first feed or be breast fed at 6-8 weeks compared to less deprived areas.
- Data from the National Diet and Nutrition Survey (NDNS) suggest that neither the average child or average adult in the UK achieves most of the government recommendations for a balanced and healthy diet.
- While the average child and average adult consumes enough protein for their daily needs, daily intake of carbohydrates, fibre and fruit and vegetables is below the government recommendations, and consumption of free sugars, total fat and saturated fat is above the recommended daily limits.

#### Excess weight

- In West Sussex in 2023/24, one in five children in reception were overweight or obese (20.3%, equating to around 1,725 children), rising to nearly one in three children in Year 6 (31.2%, equating to around 2,785 children).

- The prevalence of overweight and obesity among children in West Sussex is lower than England overall (22.1% for reception and 35.8% for Year 6); however, there are a small number of Middle layer Super Output Areas (MSOAs)<sup>ii</sup> where overweight and obesity is higher than England overall.
- For 2021/22 to 2023/24, the proportion of children moving from a healthy weight in reception to excess weight in Year 6 was 18.0% in West Sussex – a lower proportion than England (21.5%).
- Of the 11.8% of children who were in a higher weight category in reception, most remained in a higher weight category in Year 6 (74.7%), with 25.3% moving to a healthy weight.
- Girls were more likely to remain a healthy weight from reception to Year 6 than boys (83.0% compared to 77.9%). A social gradient is also evident, with a smaller proportion of pupils living in areas among the 20% most deprived remaining a healthy weight at Year 6 than those living in the least deprived areas.
- In West Sussex in 2023/24, estimates from Sport England’s Active Lives Adult Survey data (using adjusted self-reported height and weight) suggest that nearly two thirds of adults (18 years and above) are overweight or obese (63.4%). This figure is slightly lower than for England overall (64.5%).
- Among both children and adults there were inequalities in excess weight by ethnicity, sex, deprivation, disability and education.

## Nutritional standards and targets for a healthy diet

### Macronutrients and micronutrients

The key components of diet which provide us with energy and nutrients are referred to as macronutrients and micronutrients. These are required in different quantities but are equally important in the diet<sup>42</sup>. The UK government recommendations for macronutrients and micronutrients, which are based on recommendations from the Committee on Medical Aspects of Food Policy (COMA) and the Scientific Advisory Committee on Nutrition (SACN)<sup>43</sup>, are shown in the tables overleaf (Table 9 –

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<sup>ii</sup> Middle layer Super Output Areas (MSOAs) are a statistical geography created for the Census of England and Wales. They are made up of groups of Lower layer Super Output Areas (LSOAs), usually four or five. They comprise between 2,000 and 6,000 households and have a usually resident population between 5,000 and 15,000 persons. MSOAs are small enough to provide meaningful local area data, but large enough to prevent identification of individuals.

Table 14).

Table 9. Government recommendations for energy, macronutrients, salt and dietary fibre for males and females aged 1 – 18 years. Source: Public Health England, 2016.

Age (years)	1		2 - 3		4 - 6		7 - 10		11 - 14		15 - 18	
Gender	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Energy(MJ/day)	3.2	3.0	4.55	4.2	6.2	5.8	7.6	7.1	10.5	8.4	10.5	8.4
Energy (kcal/day)	765	717	1088	1004	1482	1378	1817	1703	2500	2000	2500	2000
<b>Macronutrients</b>												
Protein (g/day)	14.5	14.5	14.5	14.5	19.7	19.7	28.3	28.3	42.1	41.2	55.2	45.0
Fat (g/day) [Less than]	—	—	—	—	58	54	71	66	97	78	97	78
Saturated fat (g/day) [Less than]	—	—	—	—	18	17	22	21	31	24	31	24
Polyunsaturated fat (g/day)	—	—	—	—	11	10	13	12	18	14	18	14
Monounsaturated fat (g/day)	—	—	—	—	21	20	26	25	36	29	36	29
Carbohydrate (g/day) [At least]	—	—	145	134	198	184	242	227	333	267	333	267
Free sugars (g/day) [Less than]	—	—	15	13	20	18	24	23	33	27	33	27
Salt (g/day) [Less than]	2.0	2.0	2.0	2.0	3.0	3.0	5.0	5.0	6.0	6.0	6.0	6.0
Fibre (g/day)	—	—	15	15	15 (4y) 20 (5-6y)	15 (4y) 20 (5-6y)	20	20	25	25	30	30

<sup>1</sup>The figures in this table should be used in conjunction with the following information:

**Energy** figures were derived from SACN Dietary Reference Values for Energy (2011). Figures for all age groups, with the exception of one year olds were averaged accordingly. Figures for 11 - 18 year olds have been capped at 10.5 MJ (2500kcal)/day for males and 8.4MJ (2000kcal)/day for females to help address issues of overweight and obesity. The figures for energy in this table relate to the general population and individual requirements may vary.

**Protein** figures were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991).

**Fat** figures were calculated using the energy figures from SACN Dietary Reference Values for Energy (2011). The percentages for which to calculate grams per day of fat (35% food energy); saturated fat (11% food energy); polyunsaturated fat (6.5% food energy) and monounsaturated fat (13% food energy) were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991).

**Carbohydrates** figures were calculated using the energy figures from SACN Dietary Reference Values for Energy (2011). The percentage for which to calculate grams of carbohydrate per day (50% total dietary energy) was obtained from SACN Carbohydrate and Health (2015).

**Free sugars** are any sugars added to food or drinks, or found naturally in honey, syrups and unsweetened fruit juices. The figures for free sugars were calculated using the energy figures from SACN Dietary Reference Values for Energy (2011). The percentage for which to calculate grams of free sugars per day (5% food energy) was recommended in SACN Carbohydrate and Health (2015). No recommendation was made for free sugars for those under 2 years of age.

**Salt** figures were obtained from SACN Salt and Health report (2003). These target salt intakes do not represent ideal or optimum consumption levels, but achievable population goals.

**Dietary fibre** figures were obtained from SACN Carbohydrate and Health (2015). These figures are based on evidence in which the consumption of a variety of foods rich in dietary fibre as a naturally integrated component is associated with beneficial health outcomes [SACN Carbohydrate and Health (2015)]. No recommendations were made for children aged under 2 years, however it is recommended that from about six months of age, gradual diversification of the diet to provide increasing amounts of whole grains, pulses, fruits and vegetables should be encouraged.

Table 10. Government recommendations for energy, macronutrients, salt and dietary fibre for males and females aged 19+ years. Source: Public Health England, 2016.

Age (years)	19 - 64		65 - 74		75+	
Gender	Males	Females	Males	Females	Males	Females
Energy(MJ/day)	10.5	8.4	9.8	8.0	9.6	7.7
Energy (kcal/day)	2500	2000	2342	1912	2294	1840
<b>Macronutrients</b>						
Protein (g/day)	55.5	45.0	53.3	46.5	53.3	46.5
Fat (g/day) [Less than]	97	78	91	74	89	72
Saturated fat (g/day) [Less than]	31	24	29	23	28	23
Polyunsaturated fat (g/day)	18	14	17	14	17	13
Monounsaturated fat (g/day)	36	29	34	28	33	27
Carbohydrate (g/day) [At least]	333	267	312	255	306	245
Free sugars (g/day) [Less than]	33	27	31	26	31	25
Salt (g/day) [Less than]	6.0	6.0	6.0	6.0	6.0	6.0
Dietary fibre (g/day)	30	30	30	30	30	30

<sup>2</sup>The figures in this table should be used in conjunction with the following information:

**Energy** figures were derived from SACN Dietary Reference Values for Energy (2011). Figures for all age groups were averaged accordingly. Figures for 19 - 64 year olds have been capped at 10.5 MJ (2500kcal)/day for males and 8.4MJ (2000kcal)/day for females to help address issues of overweight and obesity. The figures for energy in this table relate to the general population and individual requirements may vary.

**Protein** figures were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991).

**Fat** figures were calculated using the energy figures from SACN Dietary Reference Values for Energy (2011). The percentages for which to calculate grams per day of fat (35% food energy); saturated fat (11% food energy); polyunsaturated fat (6.5% food energy) and monounsaturated fat (13% food energy) were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991).

**Carbohydrate** figures were calculated using the energy figures from SACN Dietary Reference Values for Energy (2011). The percentage for which to calculate grams of carbohydrate per day (50% total dietary energy) was obtained from SACN Carbohydrate and Health (2015).

**Free sugars** are any sugars added to food or drinks, or found naturally in honey, syrups and unsweetened fruit juices. The figures for free sugars were calculated using the energy figures from SACN Dietary Reference Values for Energy (2011). The percentage for which to calculate grams of free sugars per day (5% food energy) was recommended in SACN Carbohydrate and Health (2015). No recommendation was made for free sugars for those under 2 years of age.

**Salt** figures were obtained from SACN Salt and Health (2003). These target salt intakes do not represent ideal or optimum consumption levels, but achievable population goals.

**Dietary fibre** figures were obtained from SACN Carbohydrate and Health report (2015). These figures are based on evidence in which the consumption of a variety of foods rich in dietary fibre as a naturally integrated component is associated with beneficial health outcomes [SACN Carbohydrate and Health (2015)]. No recommendations were made for children aged under 2 years, however it is recommended that from about six months of age, gradual diversification of the diet to provide increasing amounts of whole grains, pulses, fruits and vegetables should be encouraged.

Table 11. Government recommendations for vitamins for males and females aged 1 – 18 years. Source: Public Health England, 2016.

Age (years)	1		2 - 3		4 - 6		7 - 10		11 - 14		15 - 18	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Vitamin A (µg/day)*	400	400	400	400	400	400	500	500	600	600	700	600
Thiamin (mg/day)	0.3	0.3	0.4	0.4	0.6	0.6	0.7	0.7	1.0	0.8	1.0	0.8
Riboflavin (mg/day)	0.6	0.6	0.6	0.6	0.8	0.8	1.0	1.0	1.2	1.1	1.3	1.1
Niacin equivalent (mg/day)	5.0	4.7	7.2	6.6	9.8	9.1	12.0	11.2	16.5	13.2	16.5	13.2
Vitamin B <sub>6</sub> (mg/day)	0.7	0.7	0.7	0.7	0.9	0.9	1.0	1.0	1.2	1.0	1.5	1.2
Vitamin B <sub>12</sub> (µg/day)	0.5	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.2	1.2	1.5	1.5
Folate (µg/day)**	70	70	70	70	100	100	150	150	200	200	200	200
Vitamin C (mg/day)*	30	30	30	30	30	30	30	30	35	35	40	40
Vitamin D (µg/day)***	10	10	10	10	10	10	10	10	10	10	10	10

<sup>3</sup>The figures in this table should be used in conjunction with the following information:

**Vitamin** figures were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991) and from SACN Vitamin D and Health (2016). Dietary Reference Values for certain nutrients are not available for children below the age of 5 years.

**Niacin equivalent and thiamin** figures were calculated using the energy figures derived from SACN Dietary Reference Values for Energy (2011). Niacin equivalent = niacin + (tryptophan divided by 60)

\*Vitamins A and C: The government recommends that children aged from six months up to five years of age are given a vitamin supplement of vitamins A and C, often provided in a combined supplement with vitamin D. This is a precautionary measure, to ensure that their requirements for these nutrients are met, at a time when it is difficult to be certain that the diet provides a reliable source. Babies fed infant formula should not be given a vitamin supplement until they are receiving less than 500ml (about a pint) of infant formula a day, because infant formula is fortified with certain nutrients, including vitamins A and C.

\*\*Folate: it is recommended that women of child bearing age take a 400µg folic acid supplement daily until the 12th week of pregnancy. This is to help prevent birth defects of the central nervous system, such as spina bifida, in your baby. If there is a family history of conditions like spina bifida (known as neural tube defects), a higher dose of 5mg of folic acid each day may be needed until the 12th week of pregnancy. This is available on prescription from your GP. Women with diabetes and those taking anti-epileptic medicines should speak to their GP for advice, as they may also need to take a higher dose of folic acid.

\*\*\*Vitamin D: The Department of Health recommends that breastfed babies from birth to one year of age should be given a daily supplement containing 8.5 to 10µg of vitamin D, to make sure they get enough. Babies fed infant formula should not be given a vitamin D supplement until they are receiving less than 500ml (about a pint) of infant formula a day, because infant formula is fortified with vitamin D. Children aged 1 to 4 years old should be given a daily supplement containing 10µg of vitamin D.

As vitamin D is found only in a small number of foods, it might be difficult to get enough from foods that naturally contain vitamin D and/or fortified foods alone. So everyone, including pregnant and breastfeeding women, should consider taking a daily supplement containing 10µg of vitamin D. Between late March/April to the end of September, the majority of people aged five years and above will probably obtain sufficient vitamin D from sunlight when they are outdoors. So you might choose not to take a vitamin D supplement during these months.

However, some groups of people will not get enough vitamin D from sunlight because they have very little or no sunshine exposure. So the Department of Health recommends that people should take a daily supplement containing 10µg of vitamin D throughout the year if they are not often outdoors, such as those who are frail or housebound; are in an institution such as a care home; usually wear clothes that cover up most of their skin when outdoors. People from minority ethnic groups with dark skin, such as those of African, African-Caribbean or South Asian origin, might not get enough vitamin D from sunlight – so they should consider taking a daily supplement containing 10µg of vitamin D throughout the year.

Table 12. Government recommendations for vitamins for males and females aged 19+ years. Source: Public Health England, 2016.

Age (years)	19 - 64		65 - 74		75+	
Gender	Males	Females	Males	Females	Males	Females
Vitamin A (µg/day)	700	600	700	600	700	600
Thiamin (mg/day)	1.0	0.8	0.9	0.8	0.9	0.7
Riboflavin (mg/day)	1.3	1.1	1.3	1.1	1.3	1.1
Niacin equivalent (mg/day)	16.5	13.2	15.5	12.6	15.1	12.1
Vitamin B <sub>6</sub> (mg/day)	1.4	1.2	1.4	1.2	1.4	1.2
Vitamin B <sub>12</sub> (µg/day)	1.5	1.5	1.5	1.5	1.5	1.5
Folate (µg/day)*	200	200	200	200	200	200
Vitamin C (mg/day)	40	40	40	40	40	40
Vitamin D (µg/day)**	10	10	10	10	10	10

\*The figures in this table should be used in conjunction with the following information:

**Vitamin** figures were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991) and SACN Vitamin D and Health (2016).

**Niacin equivalent and thiamin** figures were calculated using the energy figures derived from SACN Dietary Reference Values for Energy (2011). Niacin equivalent = niacin + (tryptophan divided by 60)

\*Folate: it is recommended that women of child bearing age take a 400µg folic acid supplement daily until the 12th week of pregnancy. This is to help prevent birth defects of the central nervous system, such as spina bifida, in your baby. If there is a family history of conditions like spina bifida (known as neural tube defects), a higher dose of 5mg of folic acid each day may be needed until the 12th week of pregnancy. This is available on prescription from your GP. Women with diabetes and those taking anti-epileptic medicines should speak to their GP for advice, as they may also need to take a higher dose of folic acid.

\*Vitamin D: As vitamin D is found only in a small number of foods, it might be difficult to get enough from foods that naturally contain vitamin D and/or fortified foods alone. So everyone, including pregnant and breastfeeding women, should consider taking a daily supplement containing 10µg of vitamin D. Between late March/April to the end of September, the majority of people aged five years and above will probably obtain sufficient vitamin D from sunlight when they are outdoors. So you might choose not to take a vitamin D supplement during these months.

However, some groups of people will not get enough vitamin D from sunlight because they have very little or no sunshine exposure. So the Department of Health recommends that people should take a daily supplement containing 10µg of vitamin D throughout the year if they are not often outdoors, such as those who are frail or housebound; are in an institution such as a care home; usually wear clothes that cover up most of their skin when outdoors. People from minority ethnic groups with dark skin, such as those of African, African-Caribbean or South Asian origin, might not get enough vitamin D from sunlight – so they should consider taking a daily supplement containing 10µg of vitamin D throughout the year.

Table 13. Government recommendations for minerals for males and females aged 1 – 18 years. Source: Public Health England, 2016.

Age (years)	1		2 - 3		4 - 6		7 - 10		11 - 14		15 - 18	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Iron (mg/day) <sup>†</sup>	6.9	6.9	6.9	6.9	6.1	6.1	8.7	8.7	11.3	14.8	11.3	14.8
Calcium (mg/day)	350	350	350	350	450	450	550	550	1000	800	1000	800
Magnesium (mg/day)	85	85	85	85	120	120	200	200	280	280	300	300
Potassium (mg/day)	800	800	800	800	1100	1100	2000	2000	3100	3100	3500	3500
Zinc (mg/day)	5.0	5.0	5.0	5.0	6.5	6.5	7.0	7.0	9.0	9.0	9.5	7.0
Copper (mg/day)	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.7	0.8	0.8	1.0	1.0
Iodine (µg/day)	70	70	70	70	100	100	110	110	130	130	140	140
Selenium (µg/day)	15	15	15	15	20	20	30	30	45	45	70	60
Phosphorus (mg/day)	270	270	270	270	350	350	450	450	775	625	775	625
Chloride (mg/day)	800	800	800	800	1100	1100	1800	1800	2500	2500	2500	2500
Sodium (g/day) <sup>‡</sup>	0.8	0.8	0.8	0.8	1.2	1.2	2.0	2.0	2.4	2.4	2.4	2.4

<sup>b</sup>The figures in this table should be used in conjunction with the following information:

**Mineral** figures were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991). Dietary Reference Values for certain nutrients are not available for children below the age of 5 years.

<sup>†</sup>Iron: The figures for women aged 11 – 14 and 15 – 18 years may be insufficient for women with high menstrual losses where the most practical way of meeting iron requirements is to take iron supplements.

<sup>‡</sup>Sodium: These figures were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991). Maximum salt recommendations for achievable population goals are presented in Table 1.

Table 14. Government recommendations for minerals for males and females aged 19+ years. Source: Public Health England, 2016.

Age (years)	19 - 64		65 - 74		75+	
	Males	Females	Males	Females	Males	Females
Iron (mg/d) <sup>†</sup>	8.7	14.8(19-50y) 8.7 (50-64y)	8.7	8.7	8.7	8.7
Calcium (mg/day)	700	700	700	700	700	700
Magnesium (mg/day)	300	270	300	270	300	270
Potassium (mg/day)	3500	3500	3500	3500	3500	3500
Zinc (mg/day)	9.5	7.0	9.5	7.0	9.5	7.0
Copper (mg/day)	1.2	1.2	1.2	1.2	1.2	1.2
Iodine (µg/day)	140	140	140	140	140	140
Selenium (µg/day)	75	60	75	60	75	60
Phosphorus (mg/day)	550	550	550	550	550	550
Chloride (mg/day)	2500	2500	2500	2500	2500	2500
Sodium (g/day) <sup>‡</sup>	2.4	2.4	2.4	2.4	2.4	2.4

<sup>‡</sup>The figures in this table should be used in conjunction with the following information:

**Mineral** figures were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991).

<sup>†</sup>Iron: The figure for women aged 19 – 50 years may be insufficient for women with high menstrual losses where the most practical way of meeting iron requirements is to take iron supplements.

<sup>‡</sup>Sodium: These figures were obtained from Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991). Maximum salt recommendations for achievable population goals are presented in Table 2.

## Macronutrients

Macronutrients are proteins, carbohydrates and fats and are required in larger quantities than micronutrients:

**Proteins** are needed for energy, growth and maintenance of the body. Many protein-rich foods are also important sources of micronutrients, such as iron and calcium. The government recommendations for daily protein intake are based on an individual's bodyweight: adults should consume 0.75g of protein per kg of bodyweight.

**Carbohydrates** include starches, fibre and sugar. The government recommends that carbohydrates should contribute to approximately 50% of total daily energy intake.

Starchy foods provide energy and are an important source of fibre as well as vitamins and minerals, including B vitamins, iron, calcium and folate.

Fibre supports a healthy digestive system, movement of food through the gut, and maintaining a healthy bodyweight. Fibre may also reduce the risk of some diseases, including cardiovascular disease, type-2 diabetes and bowel cancer. The government recommends that adults should consume 30g of fibre every day.

Sugars can be naturally occurring, such as in fruit, vegetables and dairy foods (e.g., milk and yoghurt), or they can be added to different foods and drinks. 'Free sugars' are all those that are added to foods and drinks, alongside those that are found naturally in fruit juices, purees, honey and syrups. Sugary foods and drinks can be high in calories, so having too much of them can lead to weight gain and obesity. The government recommends that no more than 5% of total daily energy intake should be from free sugars. For adults and children aged 11 years and older, this means no more than 30g/day of free sugars (equivalent to seven sugar cubes).

**Fats** in foods can either be saturated or unsaturated. In small quantities, fats are an important part of a healthy, balanced diet. Fats are a source of essential fatty acids, which the body cannot make itself, and some fats support absorption of vitamins A, D, E and K. The government recommends that total fat intake should account for no more than 33% of total daily energy intake. Saturated fats should account for no more than 10% of total daily energy intake in adults and children aged 5 years and older.

## Micronutrients

Micronutrients are mostly vitamins and minerals and required in smaller quantities than macronutrients. Vitamins and minerals have a range of functions in the body, including supporting the function of the immune system, nervous system, cardiovascular system and hormonal system, building healthy bones, teeth and muscles, maintaining healthy skin, reducing tiredness, and other functions.

Most vitamins and minerals cannot be made by the body so must be consumed in the diet (vitamin D, which is produced from the action of sunlight on the skin, is an exception). A varied and balanced diet with the right proportions of foods from the main food groups (see the Eatwell Guide below) should provide enough vitamins and minerals (with the exception of vitamin D) to meet the needs of most people.

Sodium is a mineral which helps to regulate the water content in the body. Dietary salt is the predominant source of sodium in the UK diet, with salt often added to foods and drinks during preparation and cooking. Adults and children aged 11 years and older should have no more than 6g of salt a day (around 1 level teaspoon). There are different and lower salt intake recommendations for different age-groups of children under 11 years.

## **Eatwell Guide**

The Eatwell Guide is a visual representation of the types and proportions of foods needed for a healthy balanced diet (Figure 14)<sup>44</sup>. The guide, which was launched in 2016 and replaced the Eatwell Plate, applies to most people over the age of five, recommends:

- Eating at least five portions of a variety of fruit and vegetables a day.
- Basing meals around starchy carbohydrates such as potatoes, bread, rice or pasta, choosing wholegrain options where possible.
- Eating some dairy or dairy alternatives, choosing lower fat and lower sugar options where possible.
- Including sources of protein such as beans, pulses, fish, eggs and meat, limiting the amount of red and processed meat and including two portions of fish each week, one of which should be oily.
- Choosing unsaturated oils and spreads, consuming only small amounts of these.
- Drinking six to eight cups or glasses of fluid each day.
- Limiting the amount of food and drinks high in fat, salt and sugar.

## **Vitamin and mineral supplements**

Most people can get all the vitamins and minerals they need from a healthy, balanced diet. However, some vitamin supplements are recommended at a population level:

- A daily supplement containing 10 micrograms of Vitamin D to be taken during autumn and winter (October to March).
- A daily supplement containing 400 micrograms of folic acid for women who are pregnant or trying for a baby (to be taken until week 12 of pregnancy).

There are additional nutritional guidelines for children under 5 years, alongside guidelines for the provision of food in early years and school settings. These are described in Theme 2.

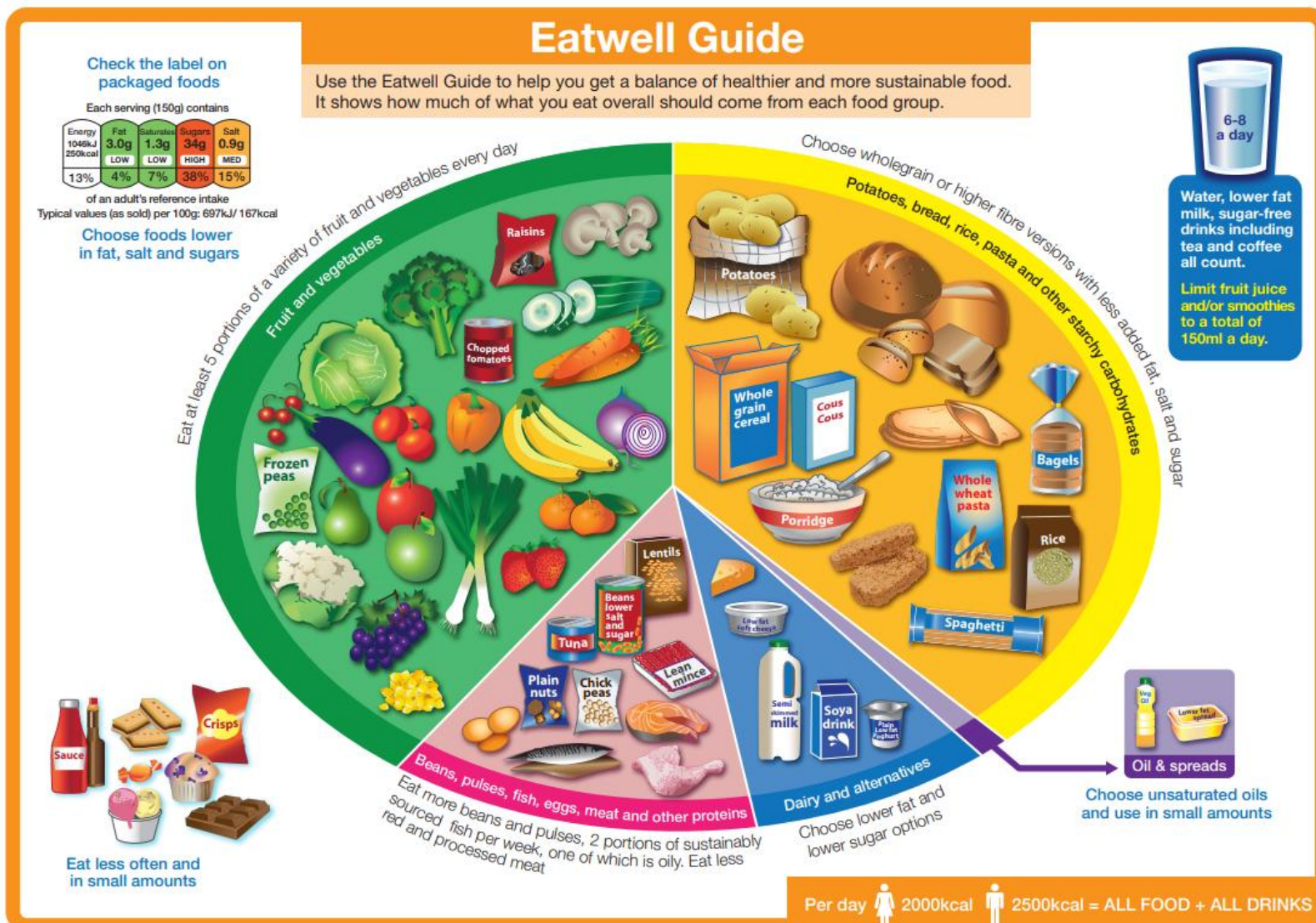


Figure 14. The Eatwell Guide. Source: Office for Health Improvement and Disparities<sup>45</sup>.

## Diet and nutrition in the population

This section provides an overview of the most recently available information about diet and nutrition across the life-course, with sections focusing on diet and nutrition in infants, children and adults.

Data about diet and nutrition in the UK population is collected by a variety of national surveys, including the UK National Diet and Nutrition Survey<sup>46</sup>, the Active Lives Survey<sup>47</sup>, and the Health Survey for England<sup>48</sup>. Each of these surveys collects data from a nationally representative sample of the UK or England population, and some have sample sizes that are sufficient to provide regional or local West Sussex estimates. Routine monitoring also provides some data on infant feeding which, alongside other diet indicators, are collected in the Public Health Outcomes Framework<sup>49</sup>.

Local health surveys also provide some data about diet and nutrition in the West Sussex population, although the data collected is more limited than national surveys. These include the West Sussex 'Your Health Matters' community survey<sup>50</sup>, which was conducted in 2024 with a random sample of over 6,400 West Sussex residents, and the West Sussex School Health Check, which was conducted in 2025 with over 6,800 pupils attending primary schools, secondary schools and further education colleges in West Sussex. Importantly, the School Health Check only included schools who self-selected to participate, meaning that the findings may not be representative of all children and young people in West Sussex.

Where data at the West Sussex geography are available, these are presented with comparison to the regional and national averages. Where West Sussex-level data are not available, national estimates are provided.

### Diet and nutrition in infants

#### Breastfeeding

Breast milk provides the ideal nutrition for infants in the first stages of life. In addition to this initial nutritive benefit, there is evidence that breastfeeding has several other benefits for maintaining a healthy weight for both mother and child long-term. For the mother, breastfeeding is linked to greater postpartum weight loss and to lower body mass index (BMI) in the longer term. Mothers who do not breastfeed may find it more difficult to return to their pre-pregnancy weight. For the health of the child, breastfeeding is linked to lower levels of child obesity. Evidence increasingly suggests that not breastfeeding might increase the risk of obesity later in life<sup>51 52</sup>.

In West Sussex in 2023/24, most babies had breast milk as their first feed, at 79.7% of babies born in this period. Significantly more babies in West Sussex had breast milk as their first feed compared to the South East (74.2%) and England (71.9%) averages.

Compared to the national average, newborns in England were less likely to have breast milk for their first feed if their mother was younger than 30 years old, of White ethnicity and had complex social factors (which include poverty, homelessness, substance misuse, recent arrival as a migrant, asylum seeker or refugee status, difficulty speaking or understanding English, being aged under 20 years, and domestic abuse)<sup>53</sup>. There was also a social gradient in first feed type, with newborns in the 30% most deprived areas being less likely to have breast milk as their first feed compared to the England average and to less deprived areas (Figure 15).

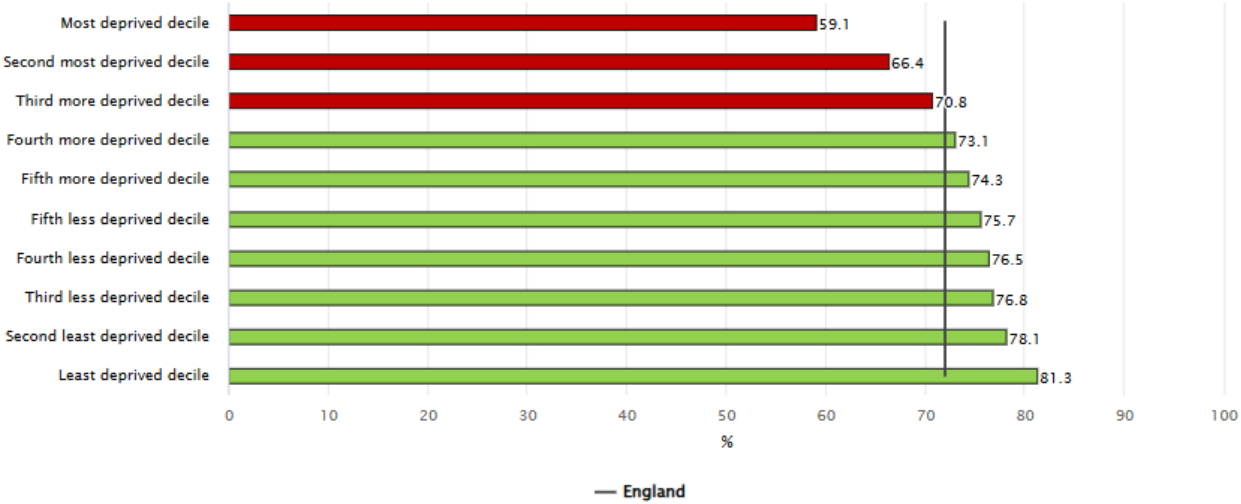


Figure 15. Proportion of babies who received breastmilk as their first feed in England in 2023/24, shown by deprivation decile (IMD 2019). Source: OHID Fingertips.

At the 6-8 week check for newborns (i.e., the Health Visitor health and development review), the prevalence of full or partial breastfeeding was 59.5% of infants in West Sussex in 2023/24. The prevalence in West Sussex was significantly higher than in England (52.7%).

At a national level, breastfeeding at 6-8 weeks was most prevalent in the 20% least deprived areas and higher than the national average. In all other areas, the prevalence of breastfeeding at 6-8 weeks was similar or lower than the national average (Figure 16).

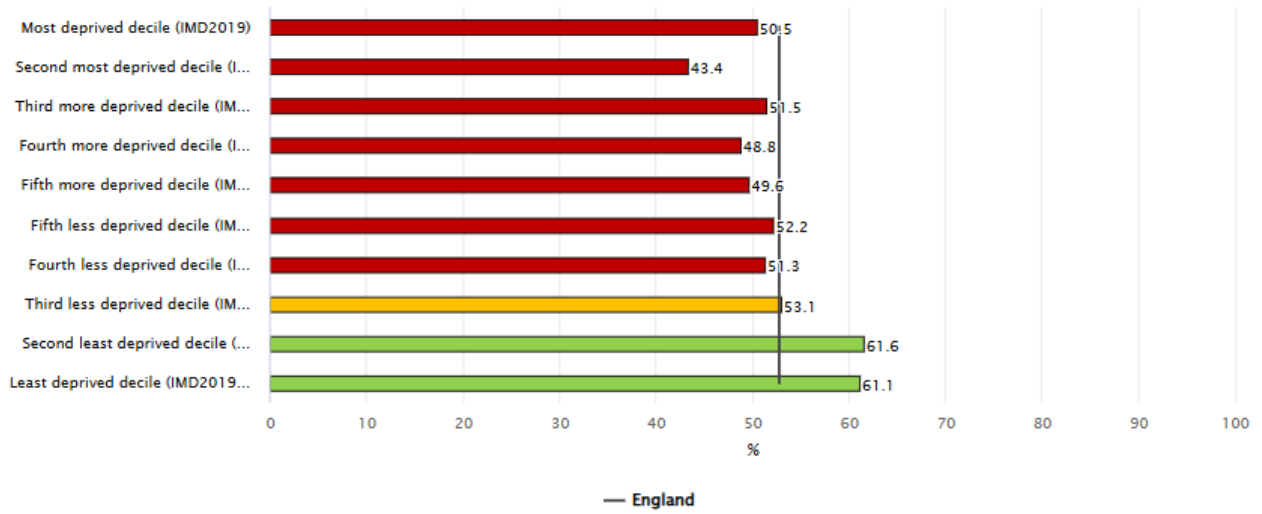


Figure 16. Prevalence of full or partial breastfeeding at 6-8 weeks in England, 2023/24, shown by deprivation decile (IMD 2019). Source: OHID Fingertips.

Breastfeeding is described in more detail in Chapter 3.

# Diet and nutrition in children and young people

## Fruit and vegetable consumption

Data from the West Sussex School Health Check suggests that most children do not meet the recommended '5-a-day' fruit and vegetable consumption and that the percentage who meet this recommendation decreases with age. More primary school-aged children (in years 4, 5 and 6) report eating their '5-a-day' (or more), at 39% of this age group, than pupils in secondary schools and further education colleges. Of pupils in years 8 and 10, 27% report eating their '5-a-day' (or more), as do 24% of pupils in years 12 and 13 (Figure 17).

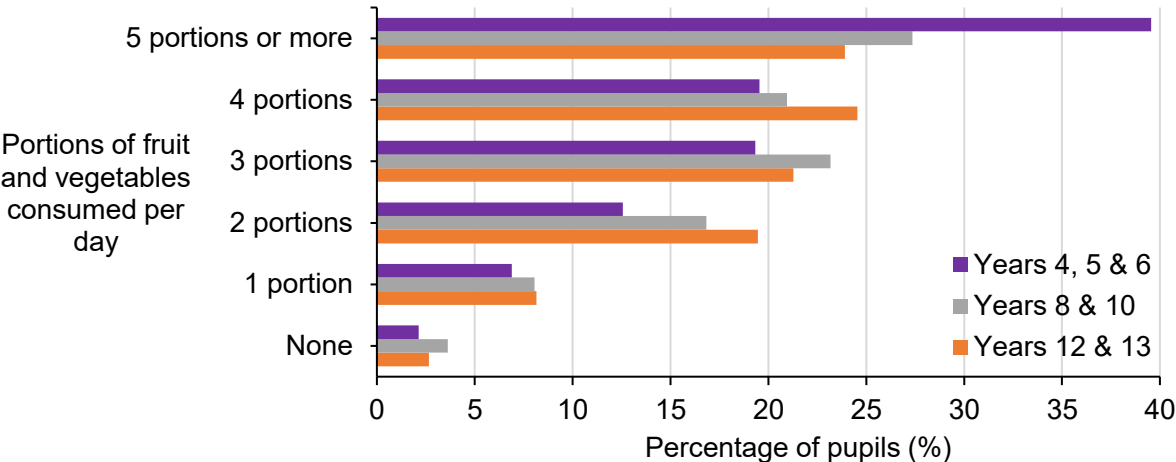


Figure 17. Daily fruit and vegetable consumption in West Sussex primary and secondary school and further education college pupils in 2025. Data source: West Sussex School Health Check, 2025.

In primary school-aged children, the percentage of children reporting that they meet the '5-a-day' fruit and vegetable recommendation varies by gender in each year group, although girls and boys are similar overall. In secondary school-aged pupils, males and females are consistently similar in meeting the recommendation by year group.

Children who took part in the West Sussex School Health Check reported higher levels of '5-a-day' fruit and vegetable consumption, compared to the national estimates from the UK National Diet and Nutrition Survey (NDNS)<sup>54</sup> and the Health Survey for England (HSE)<sup>55</sup>. These differences may relate to some methodological limitations of the West Sussex School Health Check, such as schools self-selecting to take part (meaning that schools with more of a focus on healthy behaviours may have opted to take part) and pupils self-reporting their dietary intake. The West Sussex School Health Check also covered a broader range of health and wellbeing themes than the NDNS and limited pupils to an hour to complete the survey. As such, the findings may not be representative of all children and young people in

West Sussex. The NDNS and HSE surveys, although only available at the national level, are more robust, so may provide a more accurate picture.

Both the NDNS and HSE find that less than a fifth of children are meeting the recommended '5-a-day' fruit and vegetable consumption nationally. These surveys differ in their estimates (and in the age range of children included), with the NDNS estimating that 9% of children aged 11-18 years achieved the 5-a-day recommendation between 2019-2023, whilst the HSE estimates that 19% of children aged 5-15 years achieved the recommendation in 2022. The NDNS estimates the mean fruit and vegetable intake for 11-18 year olds as 2.8 portions per day whilst the HSE estimates the mean intake as 3.3 portions per day. These estimates of mean intake and percentage meeting the recommendation fluctuate over time, such that no clear trend in fruit and vegetable consumption is apparent.

Data describing children's fruit and vegetable consumption by deprivation is available at national level (but not at local). The HSE shows no clear gradient in children's fruit and vegetable consumption by deprivation quintile, although there is a notable difference between the most and least deprived quintiles, with 17% of the most deprived children meeting the recommendation compared to 25% of the least deprived children (Figure 18). This is in contrast to the clear social gradient in fruit and vegetable consumption seen for adults (as described later in this chapter).

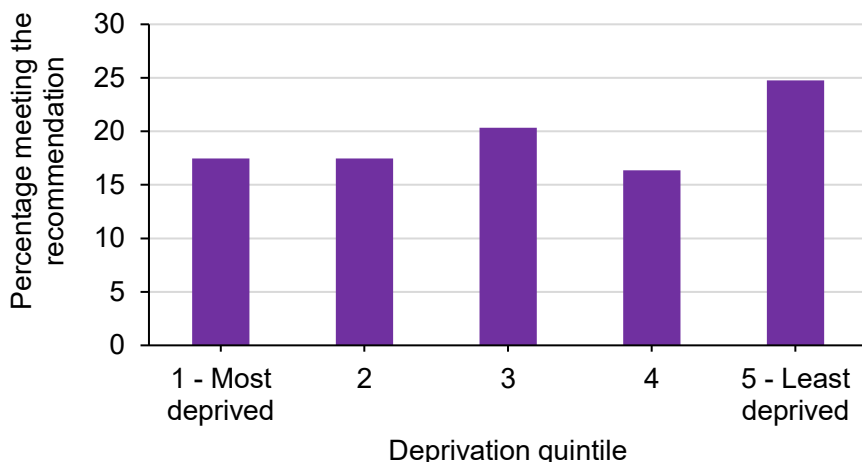


Figure 18. Children (aged 5-15) meeting the five-a-day fruit and vegetable consumption recommendation, by deprivation quintile, in England, 2022. Data source: Health Survey for England, NHS England.

Around a sixth of the West Sussex population is aged 5-18 years, equivalent to 144,360 people. Considering that only an estimated 12-19% of these children and young people do meet the recommended five-a-day fruit and vegetable intake (according to the more robust NDNS and HSE estimates), this indicates that there are an estimated 116,930-127,035 children and young people in the West Sussex

population who do not meet this recommendation – i.e., there is a substantial potential to improve population health if this recommendation were to be met.

### **Macronutrient intake in children and young people – UK National Diet and Nutrition Survey (NDNS)**

Detailed data quantifying macronutrient intake in children and young people are not available at a local level. As West Sussex-level data are not available, national estimates from the National Diet and Nutrition Survey are presented, for the period 2019-2023<sup>56</sup>. These data are compared against the government nutritional recommendations, which are provided in Table 9 –

Table 14. The West Sussex School Health Check did include questions on sugary foods and drinks, which are included alongside the national sugar data.

## **Protein**

On average, children of all age-groups in the UK consume more than enough protein to meet the daily protein intake recommendations.

Cereals, meat and milk (and related products) are the main contributors to daily protein intake in children. In younger children (aged 1.5-10 years), milks and milk products account for more of the average daily protein intake than older children and adults, at 24% and 18% in 1.5-3 year olds and 4-10 year olds, respectively. Cereals and cereal products account for 34% and 37% of the average daily protein intake in 1.5-3 year olds and 4-18 year olds, respectively. Meat and meat products account for slightly less of the average daily protein intake in younger children than older children and adults, at 21% and 26% in 1.5-3 year olds and 4-10 year olds, respectively. In older children (aged 11-18 years), meat and meat products account for 31% of daily protein intake, compared to 30% in adults (aged 19-64 years).

Red and processed meats are significant contributors to daily meat intake in children, particularly in boys aged 11-18 years, who have a median intake of 60 g/day of red and processed meats (representing 53.6% of this age group's total meat intake of 112g/day). In children aged 1.5-3 years, median intake of red and processed meats is 25 g/day, equivalent to 60.1% of this group's total meat intake. In boys and girls aged 4-10 years, median intake is 39 g/day and 36 g/day, respectively, equivalent to 52.7% and 58.1% of total daily meat intake (

*Table 15).*

*Table 15. Total meat and red/processed meat intakes in children and young people aged 1.5-18 years in the UK, 2019-2023. Data source: National Diet and Nutrition Survey.*

<b>Age and sex group</b>	<b>Children aged 1.5-3 years</b>	<b>Boys aged 4-10 years</b>	<b>Girls aged 4-10 years</b>	<b>Boys aged 11-18 years</b>	<b>Girls aged 11-18 years</b>
<b>Red and processed meat intake (g/day) (median)</b>	25	39	36	60	36
<b>Total meat intake (g/day) (median)</b>	41	74	62	112	76
<b>Percentage of total daily meat intake that is red/processed meats (%)</b>	60.1	52.7	58.1	53.6	47.4

## **Carbohydrates**

On average, the mean daily carbohydrate intake of children aged 11-18 years in the UK is below the government recommendations. Boys aged 11-18 years consume 230g/day on average (at least 333g/day is recommended) and girls aged 11-18 years consume around 204g/day (at least 267g/day is recommended).

Although the NDNS also provides data showing the mean daily carbohydrate intake of children under 11-years-old, this is not broken down in the specific age groups by which children of differing ages have differing carbohydrate requirements so is not presented here.

## **Fats**

Overall, children in the UK slightly exceeded the government recommendation of no more than 33% of total dietary energy from fat consumption (both saturated and unsaturated fats)<sup>iii</sup>. Mean intakes were 32.4% and 33.4% of total energy from fat in children aged 4-10 and 11-18 years respectively.

<sup>iii</sup> The UK's Scientific Advisory Committee on Nutrition (SACN) sets the dietary reference values (DRVs) for total fat as 33% of total energy (including any intake from alcohol) and 35% food energy (excluding energy from alcohol). For children in age groups where alcohol consumption is zero or almost zero, macronutrient intakes expressed as a percentage of food energy and total energy are the same. This means that using recommendations expressed as percentage of total energy results in intakes being more likely to exceed the recommendation.

Saturated fat intake, specifically, was above the government recommendation of no more than 10% of total dietary energy in children of all age groups (to which the recommendation applies). Mean intake of saturated fats was 12.4% of total dietary energy for children aged 4-10 years and 12.3% for children aged 11-18 years in 2019-2023. The percentage of children meeting the saturated fat recommendation was 15% of children aged 4-10 years and 16% of children aged 11-18 years.

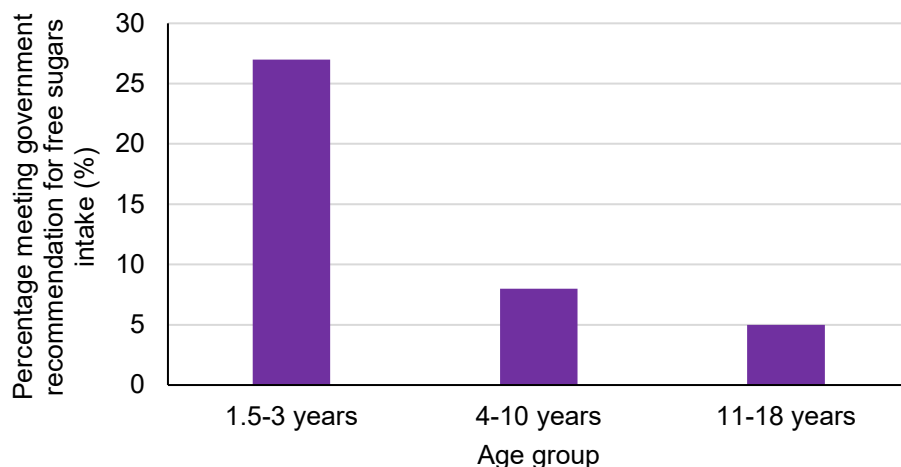
Children of all ages meet the government recommendation for trans fatty acids accounting for no more than 2% of total energy intake.

## **Fibre**

For children of all ages, mean fibre intake is below the government recommendations. For children aged 1.5-3 years, 4-10 years and 11-18 years, mean intakes are 12.5g, 14.5g and 15.4g, respectively. In 2019-2023, 22% and 14% of children aged 1.5-3 years and 4-10 years, respectively, met the fibre requirement for their age. Fewer older children met the fibre recommendation, at 4% of children aged 11-18 years.

## **Free sugars**

Over time, there has been a statistically significant downward trend in free sugars as a percentage of total daily energy intake in children. However, children of all ages (above 1.5 years) continue to exceed the government recommendation of no more than 5% of total daily energy intake from free sugars. Between 2019-2023, children aged 1.5-3 years had the lowest mean intake of free sugars, at 8.1% of total energy intake (equivalent to an average 26.6g/day), whilst girls and boys aged 11-18 years had the highest mean free sugars intakes (11.9% and 10.9% of total energy, respectively, equivalent to around 49g/day and 52.9g/day). Between 2019-2023, the proportion of children meeting the recommendation decreased with age: the proportion of children meeting the recommendation was highest in 1.5-3 year-olds, at 27%, and lowest among those aged 11-18 years, at 5% (Figure 19 **Error! Reference source not found.**).



*Figure 19. Percentage of children aged 1.5-18 years in the UK meeting the government recommendation for intake of free sugars (no more than 5% of total daily energy intake), 2019-2023. Data source: UK National Diet and Nutrition Survey.*

### **Sugary food and drink consumption in West Sussex**

School pupils who took part in the West Sussex School Health Check were asked about their consumption of two significant sources of free sugars in the diet: fizzy drinks or energy drinks and sweets or chocolate.

In all year groups of pupils completing the survey, at least half did not consume fizzy drinks or energy drinks very frequently (i.e., a few times a month or never). However, a third of primary-school aged pupils consumed fizzy drinks or energy drinks either a few times a week or every day, rising to nearly half of pupils in years 8 and 10 (46%) and years 12 and 13 (48%) (**Error! Reference source not found.**).

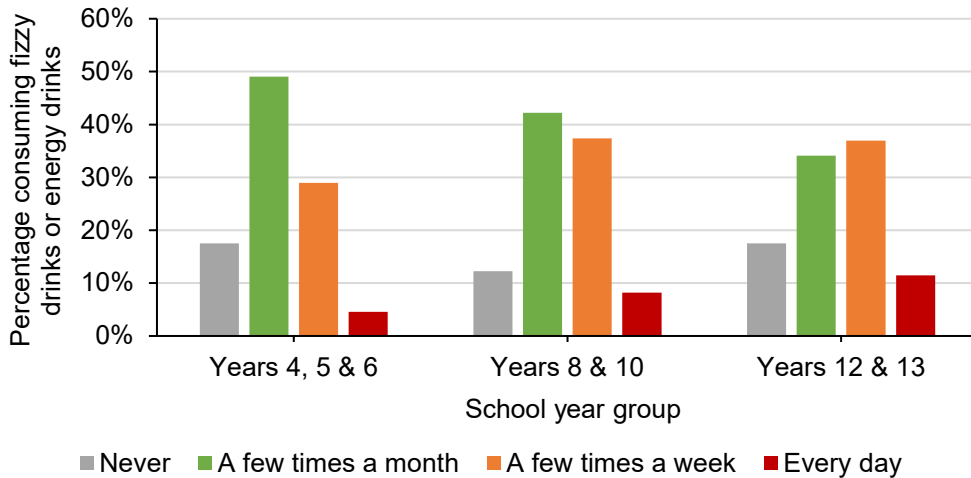


Figure 20: Frequency of fizzy drink or energy drink consumption in West Sussex school pupils, 2025. Data source: West Sussex School Health Check, 2025.

By gender, male pupils generally reported greater consumption of fizzy drinks or energy drinks than female pupils, regardless of age. The greatest difference was between male and female pupils in years 12 and 13 who consumed fizzy drinks or energy drinks every day: 15% of male pupils consumed fizzy drinks or energy drinks every day compared to 7% of female pupils (Figure 21).

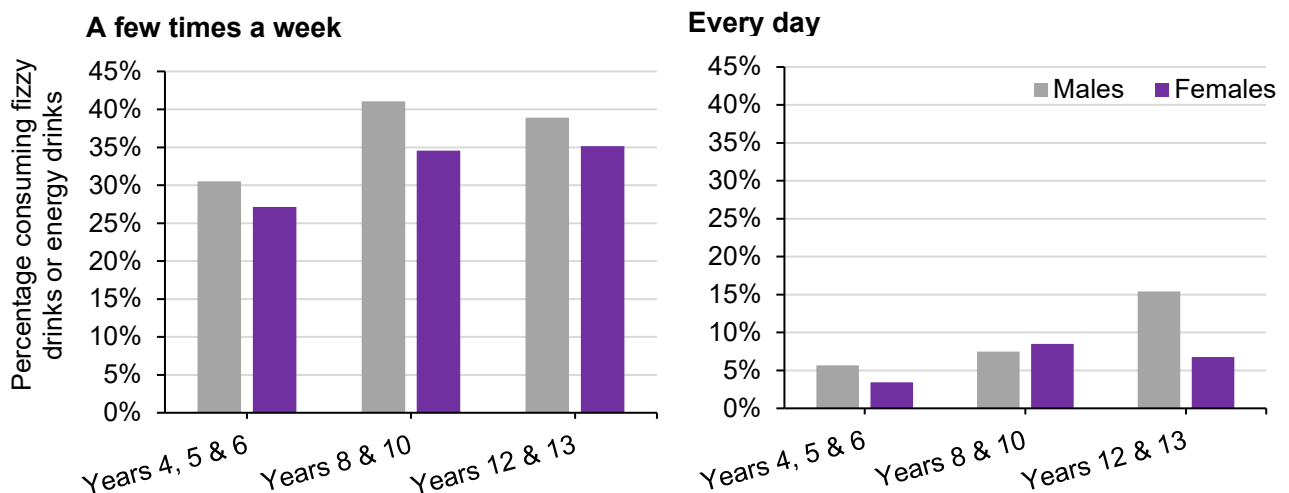


Figure 21. Frequent fizzy drink or energy drink consumption in West Sussex school pupils, 2025. Data source: West Sussex School Health Check, 2025.

Frequent consumption of sweets or chocolate (i.e., a few times a week or every day) was high in all year groups of pupils completing the survey. Across the year groups, 57% of pupils reported eating sweets or chocolate a few times a week and 20-23% reported eating sweets or chocolate every day.

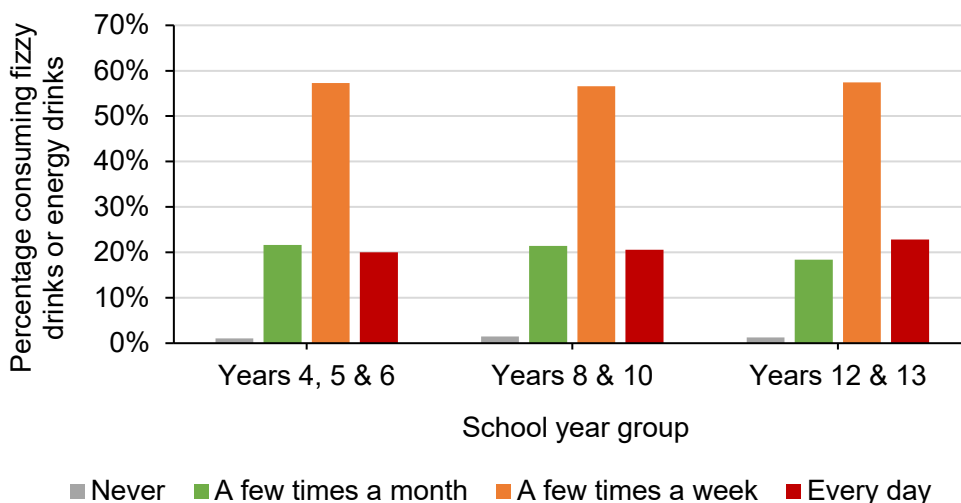


Figure 22. Frequency of sweets or chocolate consumption in West Sussex school pupils, 2025. Data source: West Sussex School Health Check, 2025.

By gender, female pupils reported slightly higher consumption of sweets or chocolates a few times a week than male pupils (a 3-4 percentage-point difference) and similar or higher consumption of sweets or chocolates every day. The greatest difference was between male and female pupils in years 8 and 10 who consumed sweets or chocolates every day: 23% of female pupils consumed sweets or chocolates every day compared to 18% of male pupils.

### Sugar consumption over time and by deprivation

Child consumption of sugar-sweetened soft drinks, which are a large contributor to free sugar intake, has decreased significantly over time. Following the introduction of the UK Soft Drinks Levy in 2018, consumption of sugar-sweetened soft drinks has continued to fall: after accounting for the prior downward trend, children consumed 3g/day less free sugar from soft drinks in the year after implementation of the Levy<sup>57</sup>.

Sugar consumption in children increases with lower socioeconomic position and higher deprivation level. Studies find that children living in more deprived areas consume a higher percentage of their daily energy from free sugars compared to their wealthier counterparts, whilst secondary-school-aged children who are eligible for free school meals (FSMs) are twice as likely to report consuming sugary drinks at least four times a day, compared to those who are not eligible for FSMs<sup>58</sup>.

### Micronutrient intake in children and young people – UK National Diet and Nutrition Survey (NDNS)

There are a large number of vitamins and minerals that are needed for a healthy diet. A selection of these micronutrients is shown here for their relevance to national policy and nutritional guidelines.

## **Folate status**

Folate is an essential vitamin that is needed for normal cell development and growth. Folate status can be assessed in different ways, including measuring the concentration of serum folate and of red blood cell (RBC) folate. Serum folate provides information on recent folate status and is measured against different thresholds for deficiency. RBC folate provides a longer-term marker of folate status during the previous 3-4 months and is less sensitive to short-term fluctuations in folate intake or metabolism. People are RBC folate-deficient if their RBC folate concentration is below a certain threshold (305 nmol/L).

In the UK, 70% of children aged 11-18 years have a serum folate concentration below the 13 nmol/L threshold indicative of possible deficiency. This falls to 24% when compared to the 7 nmol/L threshold for clinical deficiency.

In the UK, 1% of children aged 4-10 years and 12% of children aged 11-18 years are below the RBC folate threshold, indicating a folate deficiency and risk of anaemia.

## **Vitamin D status**

Vitamin D is produced from the action of sunlight on the skin and is available from foods and supplements. The availability of vitamin D in the body from these sources is reflected in the concentration of 25-hydroxyvitamin D (25-OHD) in the blood. People are vitamin D-deficient if their blood 25-OHD concentration is below a certain level (25 nmol/L).

In the UK, 10% of children aged 4-10 years and 23% of children aged 11-18 years are deficient in vitamin D.

## **Sodium/salt**

Estimates of salt intake in children and young people are not provided in the most recent release of NDNS data. Time trend analysis of sodium intake from foods from previous years shows a reduction in sodium intake from food between 2008/09 and 2016/17 in all age groups, equivalent to 0.5g sodium (1.25g salt) for children<sup>59</sup>. NB: sodium intake is based on the sodium content of foods consumed and does not fully account for salt added during cooking and excludes salt added at the table.

## **Summary of macronutrient and micronutrient intakes in UK children and application to the West Sussex population**

Overall, the NDNS shows the average child in the UK does not achieve most of the government recommendations for a balanced and healthy diet. Of the macronutrient components of diet, the NDNS shows that the average child consumes enough protein for their daily needs. Daily intake of carbohydrates and fibre is below the government recommendations. Consumption of free sugars, total fat and saturated fat is above the recommended daily limits (as a proportion of total energy intake). This may indicate that fats and sugars are contributing more

to the average child's daily calorie intake in place of the recommended contribution from starchy carbohydrates and fibre.

Around a fifth of the West Sussex population is aged 1-18 years, equivalent to around 180,700 people. Considering the low proportions of this population meeting the government nutritional recommendations, particularly for fibre, free sugars and saturated fat intake, there is a large potential to improve population health if these recommendations were to be met. Applying the mean NDNS national intake estimates to the West Sussex population (accounting for NDNS age bands but not sex differences), roughly 161,700 children and young people (aged 1-18 years) do not meet the fibre recommendation, 163,700 do not meet the free sugar recommendation and 153,900 do not meet the saturated fat recommendation.

## Diet and nutrition in adults

### Fruit and vegetable consumption

Data from NDNS and the Active Lives Survey (ALS) both show that only around a third of adults in West Sussex are meeting the '5-a-day' fruit and vegetable consumption recommendation. Data from the ALS shows that 35.1% of adults aged 16+ years met this recommendation in 2023/24. All district and borough areas in West Sussex are better or similar in meeting this recommendation than England (31.3% meeting the recommendation), although Crawley (26.9%) has fluctuated between having a similar or lower proportion meeting the recommendation than England in recent years.

By age and sex, data from the NDNS found that 17% of women and 16% of men met the '5-a-day' recommendation during 2019-2023<sup>iv</sup>. There were some differences in older adults, with 28% of men aged 65-74 meeting the recommendation, compared to 22% of women this age, and 21% of men aged 75+ years meeting the recommendation, compared to 18% of women this age.

At a national level, the ALS shows a significantly lower proportion of people with certain characteristics do not meet the recommended '5-a-day' fruit and vegetable consumption, compared to their counterparts and the England average. This included males, adults aged under 55, adults of non-White British ethnicities, disabled adults, and adults with education below level 4 (i.e., without a degree or other higher education) (Figure 23 **Error! Reference source not found.**).

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<sup>iv</sup> Consumption of fruit and vegetables for adults and older adults in the 2019-2023 NDNS data was lower than in previous survey years. The government report accompanying the data suggest that this is likely to be partly due to a change in the method for dietary data collection. It may also reflect a real reduction in fruit and vegetable consumption due to a combination of lack of availability during the COVID-19 pandemic and cost of living pressures during this data collection period.

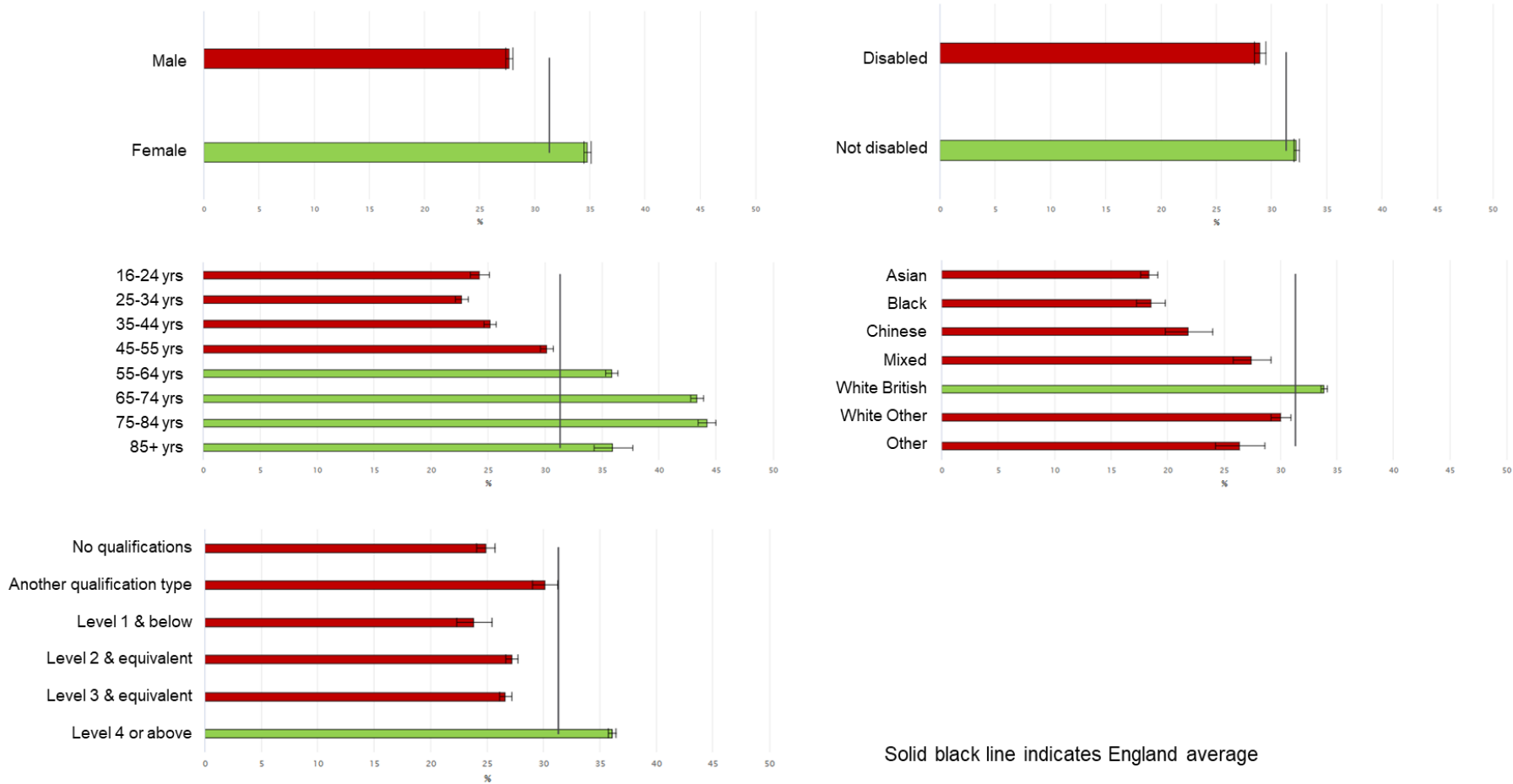


Figure 23. Adults aged 16+ meeting the recommended '5-a-day' fruit and vegetable consumption in England, in 2022/23, shown by sex, disability status, age, ethnicity and education level. Source: OHID Fingertips, using data from the Active Lives Survey.

There is also a clear social gradient in the proportion of people meeting the recommended '5-a-day' fruit and vegetable consumption in England: nearly half as many people met the recommendation in the most deprived decile (20.0%) compared to the least deprived decile (38.6%) in 2023/24.

Local data from the West Sussex Your Health Matters 2024 community health survey shows that this social gradient is replicated at a local level. In West Sussex, 23.1% of people in the most deprived quintile met the recommended '5-a-day' fruit and vegetable consumption, compared to 32.9% in the least deprived quintile. Men were less likely to consume the recommended '5-a-day' fruit and vegetables than women, and this was found across the social gradient (Figure 24).

Proportion of respondents\* meeting the '5-a-day' fruit and vegetable consumption recommendations, by deprivation quintile (nationally ranked) and sex; West Sussex  
Your Health Matters; 2024 unweighted data

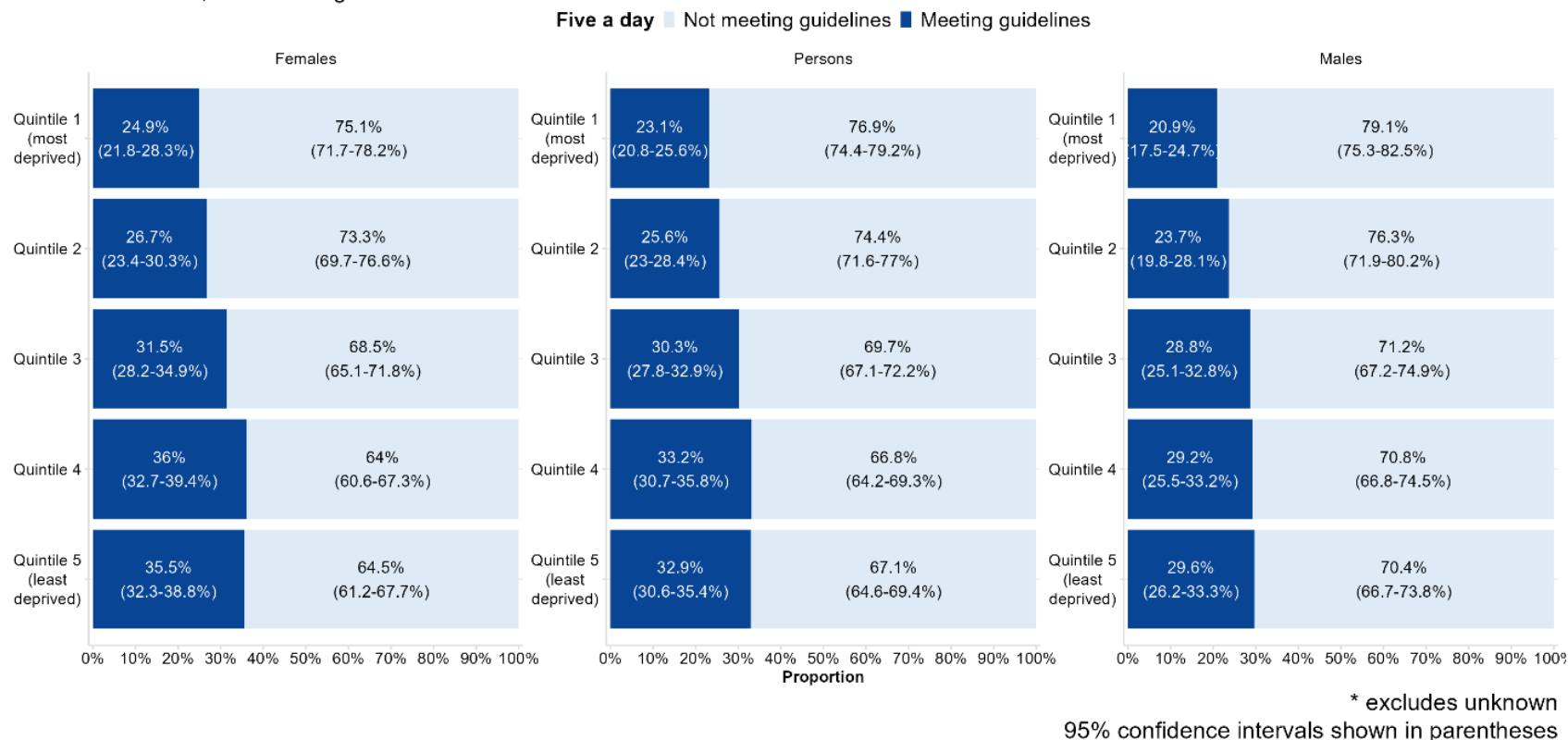


Figure 24. West Sussex residents meeting the '5-a-day' fruit and vegetable consumption recommendation, by deprivation quintile and sex. Source: Your Health Matters, 2024.

## **Macronutrient intake in adults – UK National Diet and Nutrition Survey (NDNS)**

Data quantifying macronutrient intake in adults are not available at a local level. As West Sussex-level data are not available, national estimates from the National Diet and Nutrition Survey are presented, for the period 2019-2023<sup>60</sup>. These data are compared against the government nutritional recommendations, which are provided in Table 9 –

Table 14.

## **Protein**

On average, adults of all age groups in the UK consume more than enough protein to meet the government's daily protein intake recommendations. For example, males aged 19-64 years consume 80.6g/day on average (55.5g/day is recommended) and females aged 19-64 years consume 60.2g/day on average (45.0g/day is recommended). There is variation in protein intake across all age groups, however, meaning that some adults consume protein below the recommended level.

In the UK, meat and meat products are a commonly consumed source of protein and constitute nearly a third (30%) of average daily protein intake in adults aged 19-64 years, equivalent to a median 85 g/day of meat consumed. Red and processed meats are significant contributors to daily meat intake, with aged 19-64 years having a median intake of 46g/day. There are risks attached to eating too much red meat and processed meat, including the risk of bowel cancer and high blood pressure<sup>61</sup>. Those who consume more than 90g (cooked weight) of red or processed meat a day are therefore recommended to reduce their consumption to 70g/day (which equates to around 3 slices of ham, 2 slices of bacon or 1 small beef burger<sup>62</sup>). Although the average adult in the UK consumes less than 70g/day of red or processed meat and average intake has decreased over time, there is variation in the population for both males and females. For example, males aged 19-64 years in the 97.5th percentile (i.e., the top 2.5% of red or processed meat consumers of this age group) consume 161g/day of red or processed meat.

## **Carbohydrates**

On average, adults of all age groups in the UK have a mean daily carbohydrate intake below the government recommendations for adults of their age. For example, men aged 19-64 years consume 221g/day on average (at least 333g/day is recommended) and women aged 19-64 years consume around 178g/day (at least 267g/day is recommended). Carbohydrates should make up 50% of the daily food energy intake of the average adult<sup>63</sup>. Between 2019-2023, carbohydrates accounted for 45.8% of the daily food energy intake of men aged 19+, on average, and 46.2% of the daily food energy intake of women aged 19+, on average.

## **Fats**

Overall, adults of all age groups in the UK slightly exceeded the government recommendation of no more than 33% of total dietary energy from fat consumption (both saturated and unsaturated fats). Women of all age groups had slightly higher intakes than men: mean intakes were 33.7%, 33.3% and 33.4% of total energy in women aged 19-64 years, 65-74 years and 75+ years, respectively, compared to

32.9%, 32.4% and 32.8% of total energy in men aged 19-64 years, 65-74 years and 75+ years, respectively.

Saturated fat intake was also above the government recommendation of no more than 10% of total dietary energy in adults of all age groups. Mean intake of saturated fats was 11.9% of total dietary energy for adults aged 19-64 years, 12.5% for adults aged 65-74 years, and 13.3% for adults aged 75+ years in 2019-2023. The percentage of the population meeting the saturated fat recommendation generally decreased with age. For adults aged 19-64 years, 19% met the recommendation, compared to 17% of adults aged 65-74 years and 7% of adults aged 75+ years.

Adults of all age groups meet the government recommendation for trans fatty acids accounting for no more than 2% of total energy intake.

## Fibre

Data from the most recent NDNS shows that all adult age-groups have a mean fibre intake below the government recommendation of 30g per day for adults. Fibre intake has not seen any significant improvement since the NDNS began in 2008. In 2019-2023, adults aged 19-64 years, 65-74 years and 75 years+ had mean fibre intakes of 16.4g/day, 16.9g/day and 16.4g/day, respectively. In all adult age groups, fewer women than men met the recommendation. Men aged 65-74 years had the highest fibre intake and women aged 65+ years the lowest, at 8% and 1% meeting the fibre intake recommendation, respectively.

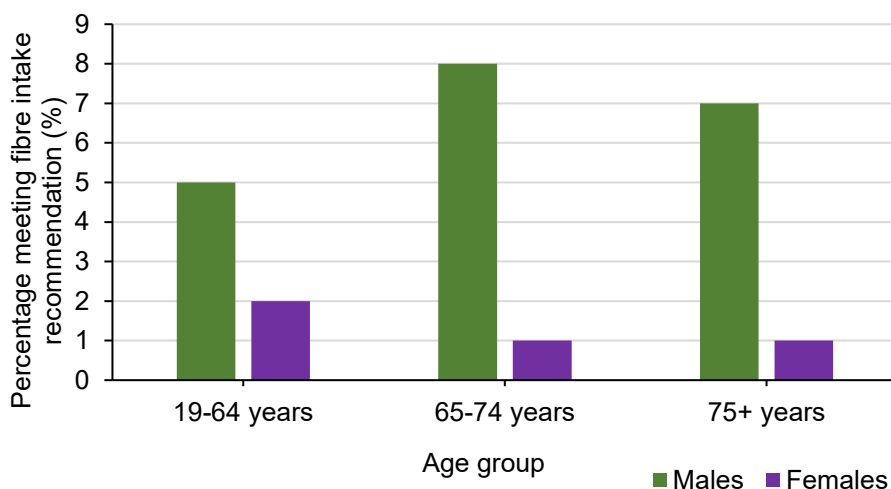


Figure 25. Percentage of adults aged 19+ years in the UK meeting the government fibre intake recommendation (30g/day for adults), 2019-2023. Data source: UK National Diet and Nutrition Survey.

## Sugar

Over time, free sugar consumption as a percentage of total daily energy intake in the UK has decreased among adults. However, adults of all ages continue to exceed the government recommendation of no more than 5% of total daily energy intake from free sugars. Between 2019-2023, mean intake of free sugars as a percentage of total energy intake was 10% for those aged 19-64 years (equivalent to an average 46.3g free sugar/day), 8.1% for those aged 65-74 years (34.9g /day) and 9.2% for those aged 75+ years (37.9g/day). Men aged 19-64 years had the highest free sugar intake amongst adults, at 10.2% of total energy intake. On average, more adults than children met the recommendation, at 17% of 19-64 year-olds, 30% of 65-74 year olds and 15% of those aged 75 years and over consuming no more than 5% of their total daily energy intake from free sugars in 2019-2023.

Consumption of sugar-sweetened soft drinks has decreased significantly over time. For example, adults aged 19-64 years consumed an average 138g/day of sugar-sweetened soft drinks in 2008-10 (the first wave of the NDNS), compared to 88g/day in 2019-2023.

Adults living in more deprived areas consume a higher percentage of their daily energy from free sugars compared to their wealthier counterparts. The available evidence exploring the prevalence and inequalities in sugar consumption by groups with protected characteristics in the UK is limited. Evidence is similarly limited for other vulnerable groups, although for those living in temporary accommodation, studies find that the contribution of free sugars to total energy intake is significantly greater than the recommended population average intake (although overall energy intake is lower than the average requirement in people living in temporary accommodation)<sup>64</sup>.

## **Micronutrient intake in adults – UK National Diet and Nutrition Survey (NDNS)**

As in the section describing micronutrient intakes in children, a selection of micronutrients is shown here for their relevance to national policy and nutritional guidelines.

### **Folate status**

As outlined in the children's diet section above, folate is an essential vitamin that can be assessed in different ways to give information on recent or longer-term folate status. For women of childbearing age (defined in the NDNS as women aged 16-49 years), there is an increased risk of neural tube defects in future children if RBC folate concentration is below a threshold of 748 nmol/L.

In the UK, more than half of adults aged 19-64 years (54%), more than half of women of childbearing age (61%) and more than a third of adults aged 65+ years (41%) have a serum folate concentration below the 13 nmol/L threshold indicative of possible deficiency. When compared against the 7 nmol/L threshold for clinical deficiency, this falls to 14% of adults aged 19-64 years and 7% of adults aged 65+

years with possible deficiency. In women of childbearing age, 17% have a serum folate deficiency below the 7 nmol/L threshold.

In the UK, 4% of adults aged 19-64 years and 2% of adults aged 65+ years are below the 305 nmol/L RBC folate threshold, indicating a folate deficiency and risk of anaemia. In women of childbearing age (defined in the NDNS as women aged 16-49 years), 83% had an RBC folate concentration below the 748 nmol/L threshold, indicating increased risk of neural tube defects.

## **Vitamin D**

As outlined in the children's diet section above, people are vitamin D-deficient if their blood 25-OHD concentration is below a certain level (25 nmol/L). In the UK, 18% of adults aged 19-64 years and 12% of adults aged 65+ years are deficient in vitamin D. Lack of vitamin D can lead to bone disorders, such as rickets in children and osteomalacia, osteoporosis and increased risk of fractures in adults.

## **Sodium/Salt<sup>65</sup>**

In 2018/19, the mean salt intake for adults aged 19-64 years was 8.4 g/day, which is 40% higher than the government recommended maximum of 6 g/day. Men, on average, consumed more salt than women, at 9.2 g/day compared to 7.6 g/day, respectively. There was wide variation in salt intake across the population, however, with people in the 97.5th percentile (i.e., the top 2.5% of salt consumers) consuming 17.8 g/day. Although salt intake in the population significantly decreased between 2005/06 and 2008/09, there have been no significant changes since then. NB: salt intake is based on 24-hour urinary sodium (whereas estimates provided in the children's section as based on the sodium content of foods consumed).

Eating too much salt can cause high blood pressure, which increases the risk of heart attacks and strokes.

## **Summary of macronutrient and micronutrient intakes in UK adults & application to the West Sussex population**

Similarly to the average UK child, the NDNS shows the average adult does not achieve most of the government recommendations for a balanced and healthy diet. Of the macronutrient components of diet, the average UK adult consumes enough protein for their daily needs. Daily intake of carbohydrates and fibre is below the government recommendations, whilst consumption of free sugars, total fat, saturated fat and salt is above the recommended daily limits. This may indicate that fats and sugars are contributing more to the average adult's daily calorie intake in place of the recommended contribution from starchy carbohydrates and fibre.

Around a four-fifths of the West Sussex population is aged 19 years and older, equivalent to around 712,100 people. Considering the low proportions of the adult population meeting the government nutritional recommendations, particularly for fibre, free sugars and saturated fat intake, there is a large potential to improve

population health if these recommendations were to be met. Applying the mean NDNS national intake estimates to the West Sussex population (accounting for NDNS age bands but not sex differences), roughly 689,800 adults (aged 19+ years) do not meet the fibre recommendation, 580,300 do not meet the free sugar recommendation and 591,900 do not meet the saturated fat recommendation.

## **Excess weight in the West Sussex population**

Having a poorer diet and nutritional balance is directly linked to a range of negative health impacts. Excess weight and obesity are some of the most significant outcomes of poor diet and nutrition, although excess weight is a complex issue with many causes. Diet and lifestyle factors, such as eating large amounts of processed or fast food, eating larger portions than needed and drinking too many sugary drinks, can contribute to excess weight but a lack of physical activity is also an important factor. In addition, some genes have been associated with excess weight and there also are medical conditions which may contribute to weight gain<sup>66</sup>. Risk and protective factors for overweight and obesity are described in Chapter 2, along with the health, social and economic impacts when food and nutritional needs are not met.

Other health impacts that are directly linked to diet and nutrition include birth defects, known as neural tube defects, due to maternal folate deficiency during pregnancy, non-alcoholic fatty liver disease and type-2 diabetes. Although these impacts are of population health importance, we focus only on excess weight here, due to the substantially higher prevalence of excess weight in the population and because excess weight and obesity are themselves risk factors for many of the additional health impacts of poor diet and nutrition.

In this section, we firstly outline how weight is typically measured in adults and children, then describe the prevalence of, and inequalities in, excess weight among children and adults in West Sussex.

The main source of data about excess weight in primary school aged children is the National Child Measurement Programme (NCMP) which provides annual estimates of excess weight and obesity for children in Reception (aged 4 to 5) and Year 6 (aged 10 to 11). NCMP data is available at a national and local level, and data showing inequalities in excess weight prevalence at the national level is supplemented here with some local analysis.

Data about excess weight and obesity in adults is collected in primary care, via the Quality and Outcomes Framework (QOF), and by national surveys, such as the annual Active Lives Survey (ALS). The West Sussex 'Your Health Matters' community survey also provides locally collected data describing excess weight in adults.

### **Measuring weight in adults**

The most widely used measure of weight is body mass index (BMI). BMI is a measure of weight relative to height. BMI for adults is classified into five categories:

*Table 16. BMI categories for adults.*

<b>BMI score</b>	<b>BMI category</b>
Below 18.5	Underweight
18.5-24.9	Healthy weight
25-29.9	Overweight
30-39.9	Obese
40 and above	Severely obese

For individuals with an Asian, Chinese, Middle Eastern, Black African or African-Caribbean family background, lower BMI thresholds are used due to the increased risk of central adiposity resulting in cardiometabolic risk occurring at a lower BMI<sup>67</sup>:

*Table 17. BMI categories for adults with an Asian, Middle Eastern, Black African or African-Caribbean family background.*

<b>BMI score</b>	<b>BMI category</b>
23-27.4	Overweight
27.5 or above	Obese

While BMI can be useful for assessing whether someone is of a healthy weight, a limitation of BMI is that it measures weight but does not measure fat. People who are very muscular such as sportspeople can have a high BMI without much body fat<sup>68</sup>.

## **Measuring weight in children**

Assessing the BMI of children is more complex than assessing the BMI of adults as children's BMI changes as they mature. While there are fixed BMI thresholds for adults, children's BMI is categorised using variable thresholds that take age and sex into account. Thresholds are usually derived from a reference population, known as

a child growth reference. In England, the National Institute for Health and Care Excellence (NICE) recommend using the British 1990 (UK90) growth reference.

*Table 18. BMI categories for children.*

<b>BMI centile range</b>	<b>BMI category</b>
Less than or equal to 2 <sup>nd</sup> centile	Underweight
Greater than 2 <sup>nd</sup> and less than 85 <sup>th</sup> centile	Healthy weight
Greater than or equal to 85 <sup>th</sup> and less than 95 <sup>th</sup> centile	Overweight
Greater than or equal to 95 <sup>th</sup> centile	Obesity
Greater than or equal to 99.6 centile	Severe obesity

Please note that population monitoring cut offs for overweight and obesity (85<sup>th</sup> and 95<sup>th</sup> centile respectively) are lower than the clinical cut offs (91<sup>st</sup> and 98<sup>th</sup> centiles respectively). This is to identify children who are at risk of becoming clinically overweight or obese at an early stage<sup>69</sup>.

## **Excess weight prevalence in children in West Sussex**

The National Child Measurement Programme (NCMP) 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.

### **Excess weight among children in Reception**

In West Sussex in 2023/24, one in five children in Reception were overweight or obese (20.3%, equating to around 1,725 children). This is lower than England overall (22.1%).

Variation in weight exists within West Sussex. Among reception aged children, Adur had the highest prevalence of excess weight (24%) and Horsham had the lowest prevalence of excess weight (17.6%). All local authorities in West Sussex had a lower or similar prevalence of excess weight compared to England.

Reception prevalence of overweight and obesity in West Sussex is shown in Table 19.

Table 19. Reception prevalence of overweight (including obesity) in West Sussex, 2023/24. Source: NHS Digital, National Child Measurement Programme (via OHID, Fingertips).

Area	Number of children	Number of children measured	Prevalence			Versus England
			%	Lower CI	Upper CI	
Adur	145	605	24.0	20.4	27.1	Similar
Arun	320	1,380	23.2	21.1	25.6	Similar
Chichester	185	980	18.9	16.4	21.3	Better
Crawley	310	1,455	21.3	19.3	23.5	Similar
Horsham	250	1,420	17.6	15.8	19.8	Better
Mid Sussex	305	1,630	18.7	17.0	20.7	Better
Worthing	210	1,020	20.6	18.1	23.0	Similar
West Sussex	1,725	8,490	20.3	19.5	21.2	Better
South East	19,085	91,680	20.8	20.6	21.1	Better
England	123,709	560,720	22.1	22.0	22.2	Not compared

In 2021/22 to 2023/24 four small areas (Middle Layer Super Output Areas (MSOAs)) in West Sussex had a significantly higher prevalence of excess weight among reception aged children than England. These areas all fall within Arun district:

- Hawthorn Road (33.3%)
- Littlehampton West and River (31.6%)
- Bognor Regis Central (28.6%)
- Wick and Toddington (26.2%)

The small area with the lowest prevalence was Burgess Hill South (10%).

Reception prevalence of overweight and obesity in West Sussex MSOAs is shown in Figure 26.

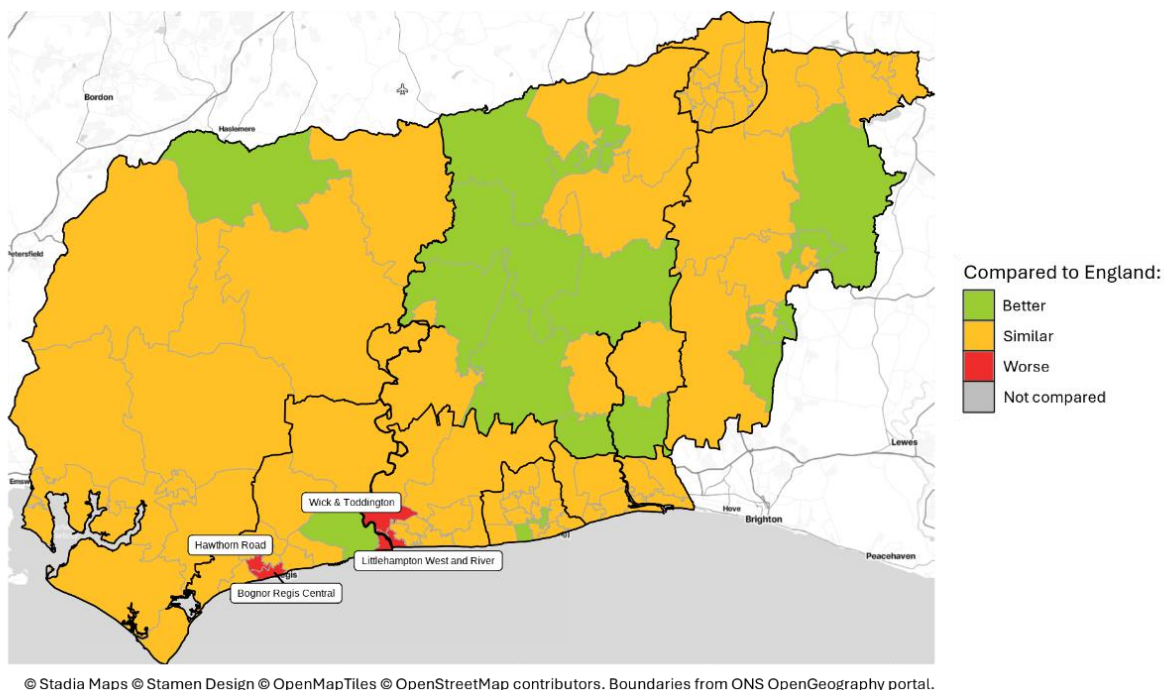


Figure 26: Reception prevalence of overweight (including obesity), 3 years data combined; in West Sussex MSOAs; 2021/22 – 2023/24. Source: NHS Digital, National Child Measurement Programme (reallocated to MSOAs by OHID, Fingertips).

## Excess weight among children in Year 6

In West Sussex in 2023/24, nearly one in three children in Year 6 were overweight or obese (31.2%, equating to around 2,785 children). This is lower than England overall (35.8%).

Among children in Year 6, Arun had the highest prevalence of excess weight (37.3%) and Horsham had the lowest prevalence of excess weight (25.5%). All local authorities in West Sussex had a lower or similar prevalence of excess weight compared to England.

Year 6 prevalence of overweight and obesity in West Sussex is shown in Table 20.

Table 20. Year 6 prevalence of overweight (including obesity) in West Sussex, 2023/24. Source: NHS Digital, National Child Measurement Programme (via OHID, Fingertips).

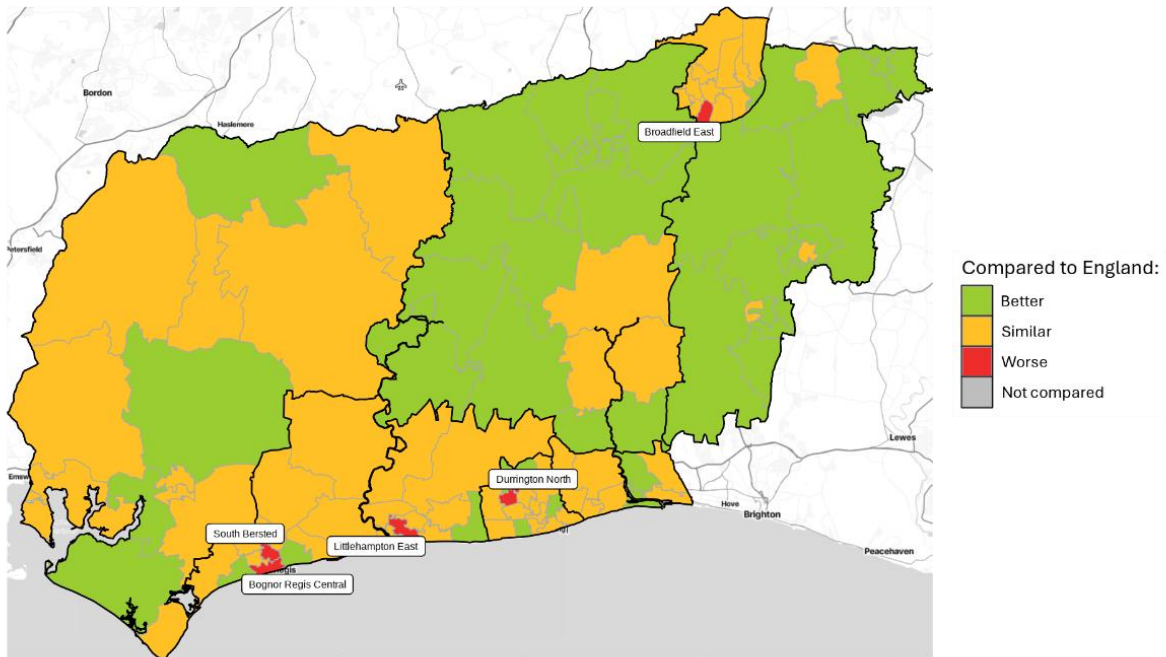
Area	Number of children	Number of children measured	Prevalence			Versus England
			%	Lower CI	Upper CI	
Adur	220	715	30.8	27.8	34.6	Better
Arun	570	1,530	37.3	34.8	39.6	Similar
Chichester	305	1,045	29.2	26.4	31.8	Better
Crawley	505	1,470	34.4	32.0	36.9	Similar
Horsham	365	1,430	25.5	23.4	28.0	Better
Mid Sussex	430	1,635	26.3	24.1	28.4	Better
Worthing	390	1,110	35.1	32.5	38.1	Similar
West Sussex	2,785	8,940	31.2	30.2	32.1	Better
South East	31,490	96,440	32.7	32.4	32.9	Better
England	217,532	606,863	35.8	35.7	36.0	Not compared

In 2021/22 to 2023/24 five small areas (MSOAs) in West Sussex had a significantly higher prevalence of excess weight among Year 6 children than England. These areas include:

- Durrington North (47.3%)
- South Bersted (46.9%)
- Broadfield East (45.2%)
- Littlehampton East (45.1%)
- Bognor Regis Central (44.2%).

The small area with the lowest prevalence was Haywards Heath North East (19%).

Year 6 prevalence of overweight and obesity in West Sussex MSOAs is shown in Figure 27.



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Figure 27. Year 6 prevalence of overweight (including obesity), 3 years data combined; in West Sussex MSOAs; 2021/22 – 2023/24. Source: NHS Digital, National Child Measurement Programme (reallocated to MSOAs by OHID, Fingertips).

### Trends in excess weight prevalence in children

Although lower than England overall, the prevalence of overweight and obesity among children living in West Sussex has been gradually increasing over time.

Among children in Reception and Year 6, up until 2020/21 only small increases in the prevalence of overweight and obesity were observed. However, in 2020/21, the measurement year following the start of the COVID-19 pandemic, there was a large increase in the prevalence of overweight and obesity amongst both boys and girls<sup>70</sup>. Levels of overweight and obesity may have increased during the COVID pandemic due to a reduction in physical activity and an increase in unhealthy eating habits<sup>71</sup>. Data from 2021/22 onwards suggests that this has not been a long-term increase. Figure 28 shows Reception prevalence of overweight and obesity over time. Figure 29 shows Year 6 prevalence of overweight and obesity over time.

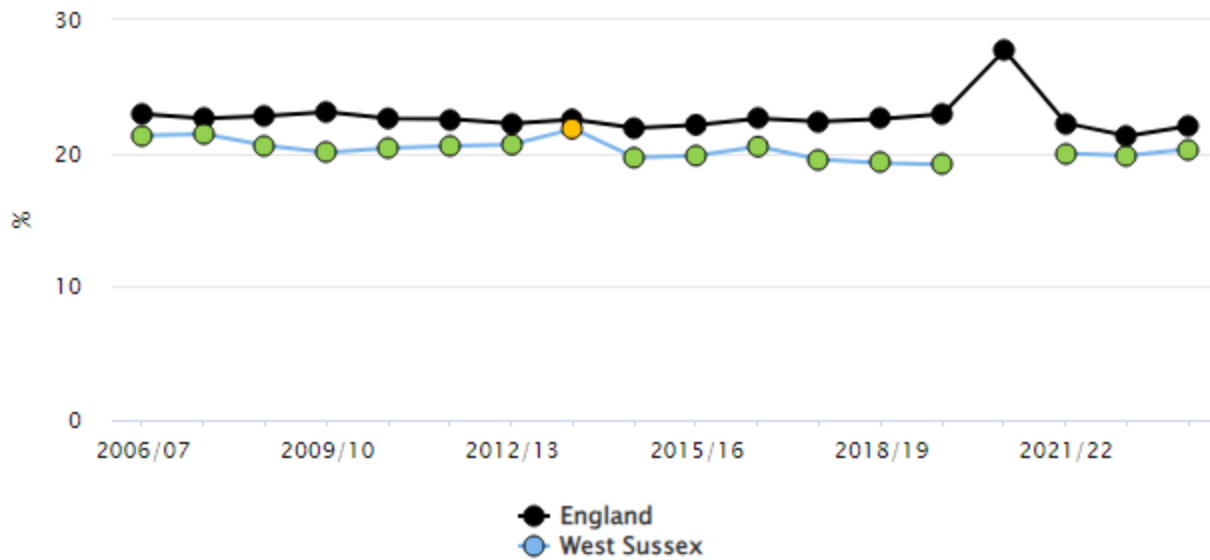


Figure 28. Reception prevalence of overweight (including obesity) in West Sussex <sup>v</sup>. Source NHS Digital, National Child Measurement Programme (via OHID, Fingertips).

<sup>v</sup> The start of the 2020/21 NCMP data collection was delayed due to the COVID-19 pandemic response. In March 2021 local authorities were asked to collect a representative 10% sample of data because it was not feasible to expect a full NCMP collection so late into the academic year. This sample has enabled national and regional estimates of children’s weight status (including obesity prevalence) for 2020 to 2021, but estimates are unavailable for West Sussex. As the final sample was not fully representative of the child population, weighting was applied to the analysis to adjust for under or over representation of demographic and socioeconomic groups and make it comparable to previous years of NCMP data ([Fingertips | Department of Health and Social Care](#)).

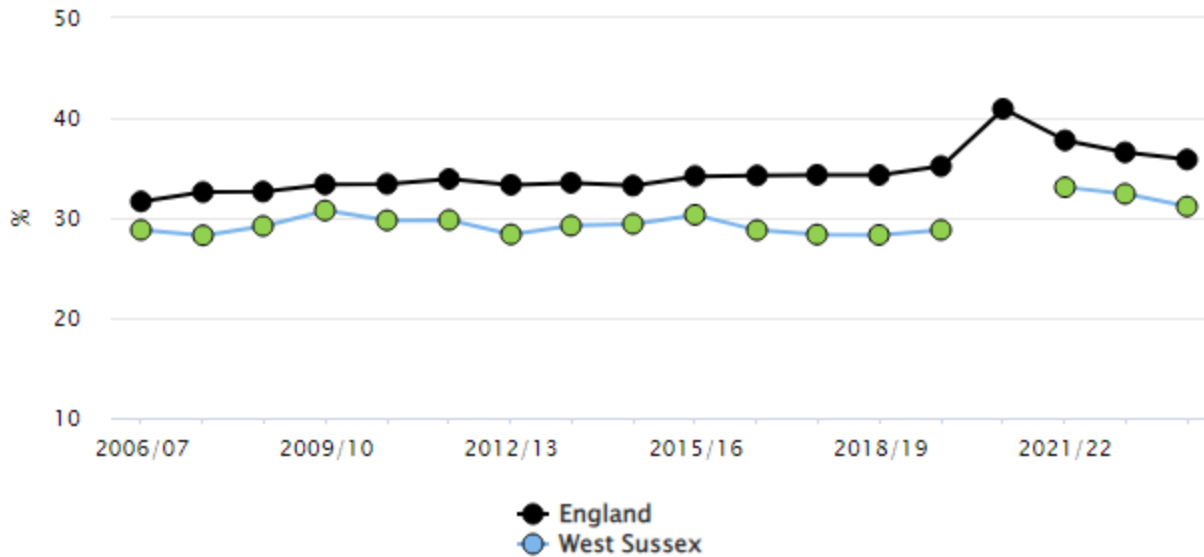


Figure 29. Year 6 prevalence of overweight (including obesity) in West Sussex<sup>vi</sup>. Source: NHS Digital, National Child Measurement Programme (via OHID, Fingertips).

## Changes in child weight status between Reception and Year 6

### England

Weight status changes in individual children between Reception in 2017 to 2018 and Year 6 in 2023 and 2024 have been assessed using NCMP data<sup>72</sup>. In England:

- Of the children who were a healthy weight in Reception (84.8%), most remained a healthy weight in Year 6 (77.6%), with 20.8% moving to a higher weight category.
- Of the 14.1% of children who were in a higher weight category, most remained in a higher weight category (76.6%), with 23.4% moving to a healthy weight.

<sup>vi</sup> The start of the 2020/21 NCMP data collection was delayed due to the COVID-19 pandemic response. In March 2021 local authorities were asked to collect a representative 10% sample of data because it was not feasible to expect a full NCMP collection so late into the academic year. This sample has enabled national and regional estimates of children's weight status (including obesity prevalence) for 2020 to 2021, but estimates are unavailable for West Sussex. As the final sample was not fully representative of the child population, weighting was applied to the analysis to adjust for under or over representation of demographic and socioeconomic groups and make it comparable to previous years of NCMP data ([Fingertips, Department of Health and Social Care, Reception prevalence of overweight \(including obesity\), Indicator Definitions and Supporting Information](#))

- A higher proportion of girls (79.7% compared to 75.5% of boys), and children living in the least deprived areas (84.7% compared to 71.8% living in the most deprived areas) remained a healthy weight.
- Compared with all children who were a healthy weight in reception, higher proportions of children from Chinese (80.1%), White and Asian (79.8%) and White British (79.1%) ethnic groups remained a healthy weight in Year 6. Higher proportions of children from Bangladeshi (27.8%), Indian (22.4%), Pakistani (26%), other Asian background (23.9%), Black African (26.5%), Black Caribbean (27.2%), other Black background (26.7%), White and Black African (24.9%), White and Black Caribbean (26.2%) and any other ethnic group (24%) moved from a healthy weight to a higher weight category.
- Between Reception and Year 6, 20.8% of children moved to a higher weight category (overweight, living with obesity or severe obesity). This was lower among girls and children living in the least deprived areas (girls: 18.4%, boys: 23.1%; least deprived areas: 13.4%, most deprived areas: 26.4%).

Figure 30 shows the change in child weight status from Reception (2017/18) to year 6 (2023/24) in England.

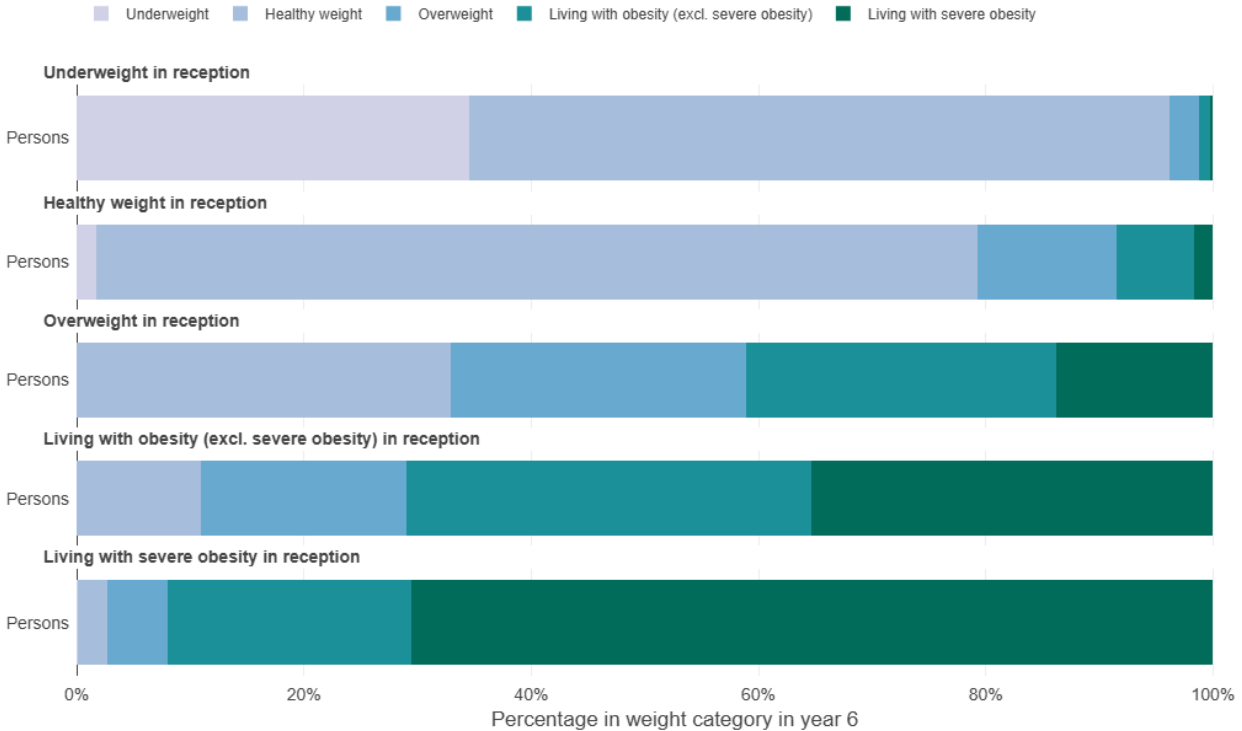


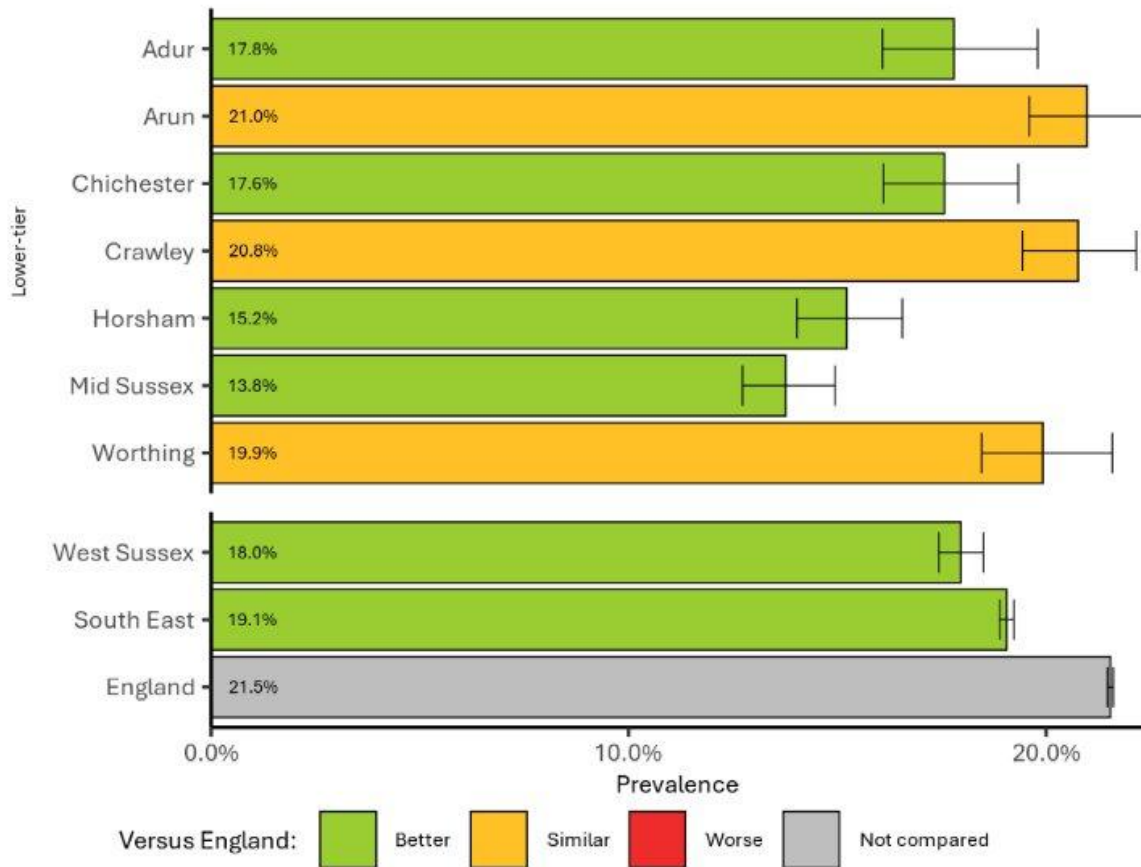
Figure 30. Changes in child weight status between reception aged 4 to 5 years (2017/18) and year 6 aged 10 to 11 years (2023/24) in England. Source: OHID<sup>73</sup>

## West Sussex

Weight status changes in individual children between Reception and Year 6 have also been assessed using local level data. In West Sussex:

- For 2021/22 to 2023/24, the proportion of children moving from a healthy weight in Reception to excess weight in Year 6 was 18.0% in West Sussex – a lower proportion than England (21.5%) and the South East (19.1%).
- Across the district and boroughs, Arun had the highest proportion of children moving from a healthy weight to excess weight (21.0%), and Mid Sussex had the lowest (13.8%). Arun (21%), Crawley (20.8%) and Worthing (19.9%) did not differ from England. All other lower-tier authorities in West Sussex had a lower proportion than England (Adur: 17.8%; Chichester: 17.6%; Horsham: 15.2%, Mid Sussex: 13.8%).
- It is important to note that areas with lower proportions of children moving from healthy weight in Reception to excess weight in Year 6 still see a large increase in prevalence of overweight and obesity between Reception and Year 6.

The percentage of children moving from a healthy weight in Reception to overweight or obesity in Year 6 among West Sussex lower-tier authorities is shown in Figure 31.

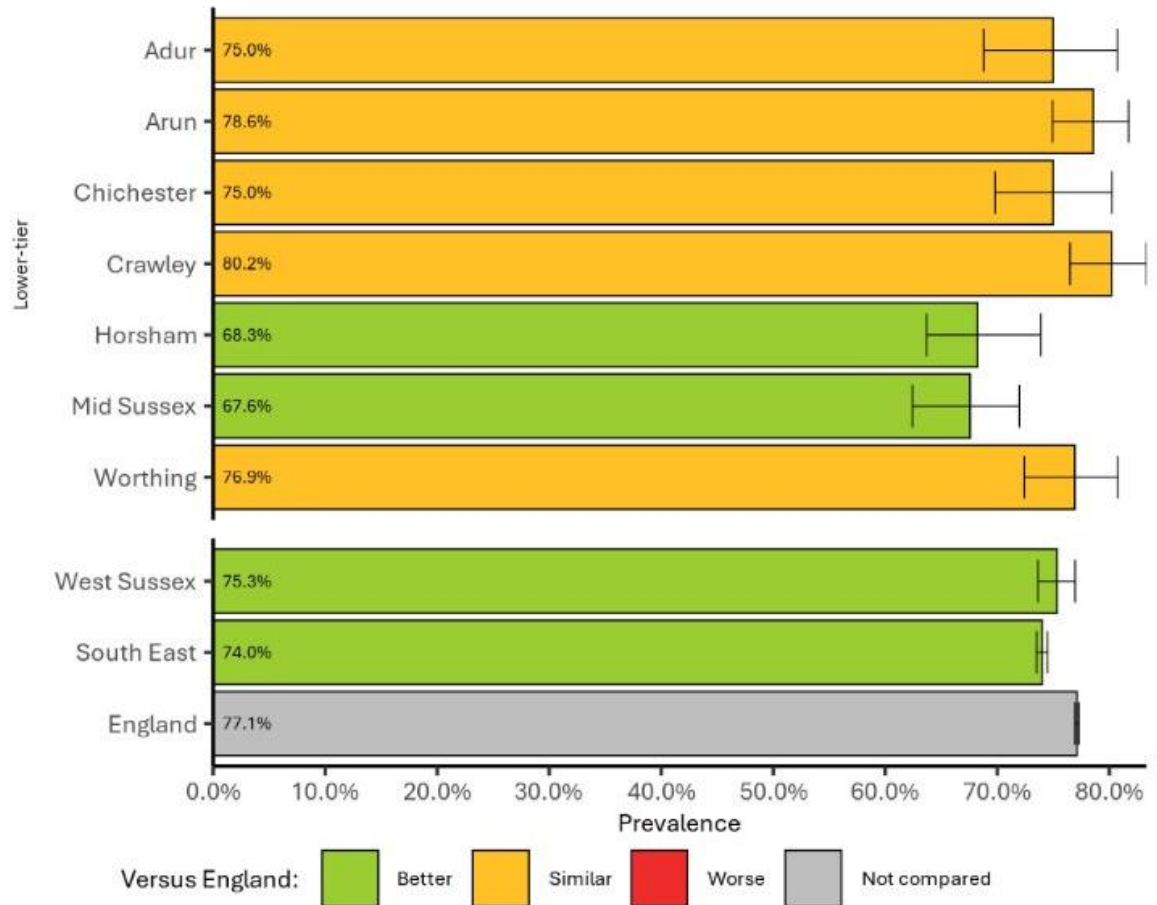


Note. Clinical BMI thresholds have been used to assign children to a BMI category as this analysis tracks individuals. Therefore, proportions falling into each BMI category will be different to published population level prevalence estimates. The time period covers the years that children were measured in Year 6. Local authority and region have been defined from the postcode of the child residence in the reception measurement record.

Figure 31. Percentage of children moving from healthy weight in reception to overweight (including obesity) in Year 6 among West Sussex lower-tier authorities; 2021/22 – 2023/24. Source: NHS Digital, National Child Measurement programme (via OHID, Fingertips).

- For 2021/22 to 2023/24, three quarters (75.3%) of Reception children remained overweight or obese in Year 6 – a lower proportion than England (77.1%).
- Across the district and boroughs, Crawley had the highest proportion of Reception children remaining overweight or obese in Year 6 (80.2%), and Mid Sussex had the lowest (67.6%). Aside from Mid Sussex (67.6%) and Horsham (68.3%), all lower-tier authorities in West Sussex did not differ from England.
- It is important to note that whilst some areas have a lower proportion of Reception children remaining overweight or obese at Year 6, most children remain an unhealthy weight.

The percentage of children remaining overweight or obese in Year 6 among West Sussex lower-tier authorities is shown in Figure 32.

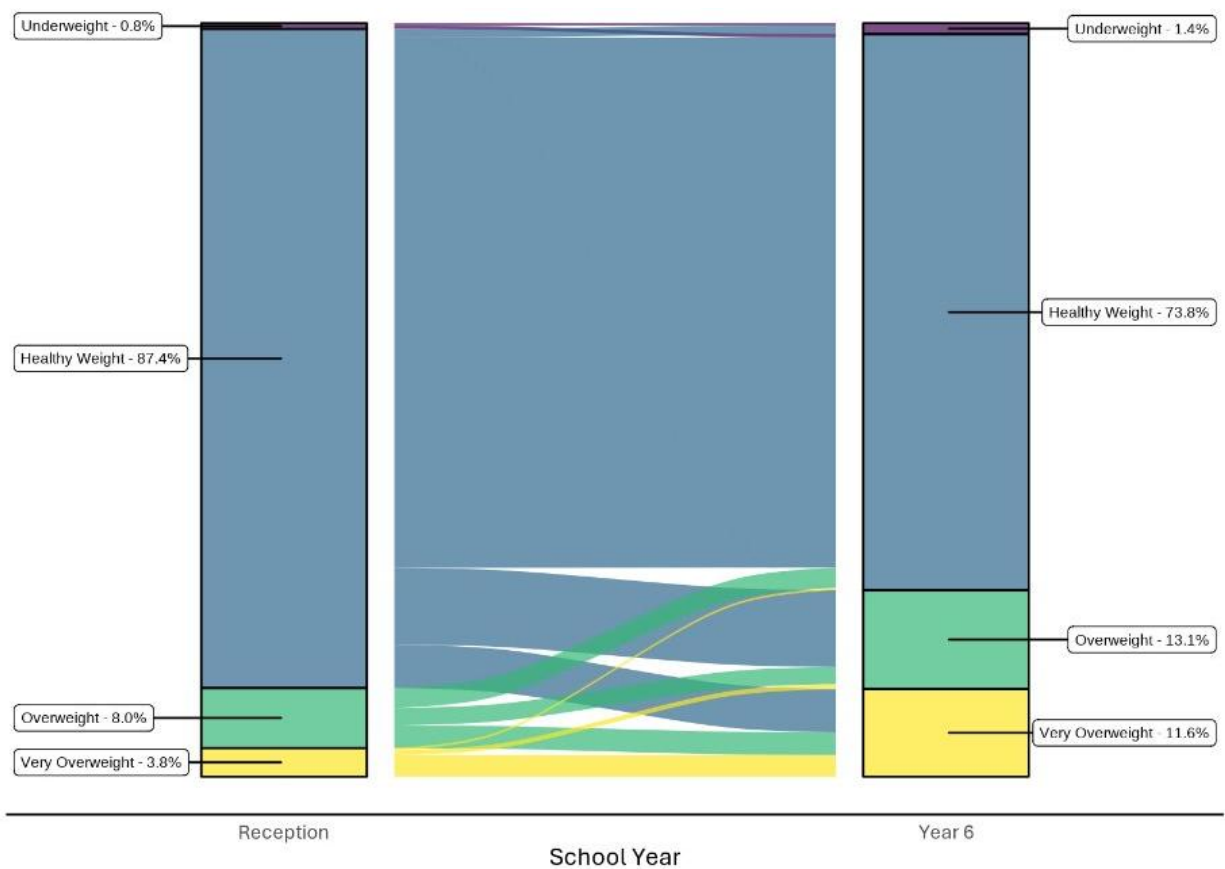


Note. Clinical BMI thresholds have been used to assign children to a BMI category as this analysis tracks individuals. Therefore, proportions falling into each BMI category will be different to published population level prevalence estimates. The time period covers the years that children were measured in Year 6. Local authority and region have been defined from the postcode of the child residence in the reception measurement record.

Figure 32. Percentage of Reception aged children remaining overweight (including obesity) in Year 6 among West Sussex lower-tier authorities; 2021/22 – 2023/24/ Source: NHS Digital, National Child Measurement Programme (via OHID, Fingertips).

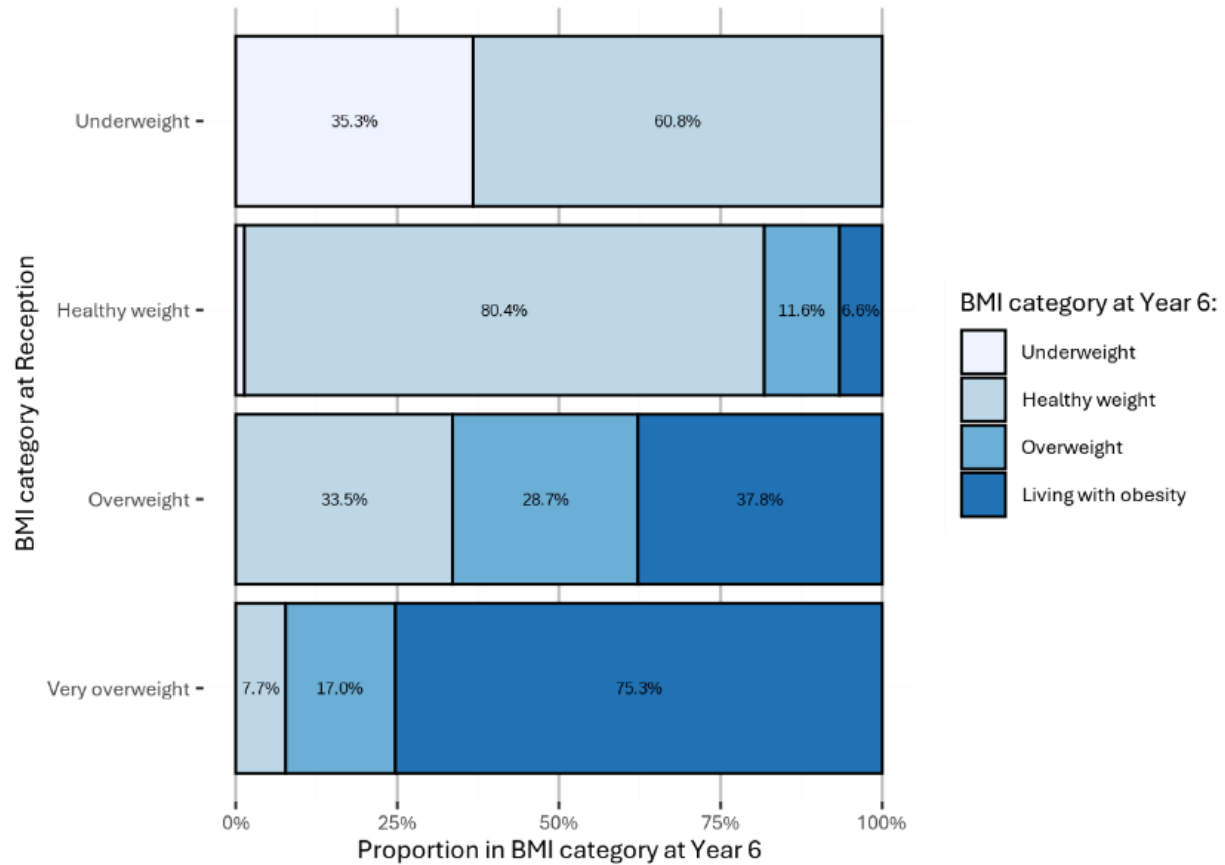
- Of the children who were a healthy weight in Reception (87.4%), most remained a healthy weight in Year 6 (80.4%), with 18.2% moving to a higher weight category.
- Of the 11.8% of children who were in a higher weight category, most remained in a higher weight category (74.7%), with 25.3% moving to a healthy weight.

Figure 33 and Figure 34 show the change in child BMI category from Reception to Year 6. Figure 33 shows the proportion of children in each weight category at Reception and Year 6 and the flow of movement between weight categories between the two timepoints. The thickness of the line linking one weight category to another represents the number of children moving between weight categories. Figure 34 shows the data as a bar chart and shows the proportion in each weight category at Year 6 by children's weight category at Reception. Table 21 shows the change in weight category from Reception to Year 6, providing the proportion in each weight category at Year 6 and the number in each weight category at both Reception and Year 6.



Source: Local access to record level National Child Measurement Programme data (2013/14 to 2023/24)

Figure 33. Change in weight status from Reception (aged 4-5 years) to Year 6 (aged 10-11 years). (Pupils in Reception in 2013/14 to 2017/18, measured in Year 6 in 2019/20 to 2023/24).



Source: Local analysis of NCMP data.

Notes. Proportions based on counts less than 8 are suppressed. Labels for proportions less than 5% are not shown. Excludes children who may live within West Sussex but attend schools outside the county. Only includes children with valid measurements at both Reception and Year 6.

Figure 34. Change in BMI category among West Sussex pupils from Reception to Year 6 (Includes children in reception in 2013/14 to 2017/18).

Table 21. Change in BMI category from Reception to Year 6; West Sussex; Reception cohort from 2013/14 to 2017/18.

Change in BMI category		Number at Reception	Number at Year 6	Proportion	95% CIs	
Reception	Year 6				Lower	Upper
Underweight	Underweight	255	90	35.3%	29.9%	41.6%
	Healthy weight	255	155	60.8%	55.9%	67.8%
	Overweight	255	-	-	-	-
	Very overweight	255	-	-	-	-
Healthy weight	Underweight	28,415	380	1.3%	1.2%	1.5%
	Healthy weight	28,415	22,855	80.4%	80.0%	80.9%
	Overweight	28,415	3,310	11.6%	11.3%	12.0%
	Very overweight	28,415	1,870	6.6%	6.3%	6.9%
Overweight	Underweight	-	-	-	-	-
	Healthy weight	2,595	870	33.5%	31.8%	35.5%
	Overweight	2,595	745	28.7%	26.9%	30.4%
	Very overweight	2,595	980	37.8%	35.9%	39.6%
Very overweight	Underweight	-	-	-	-	-

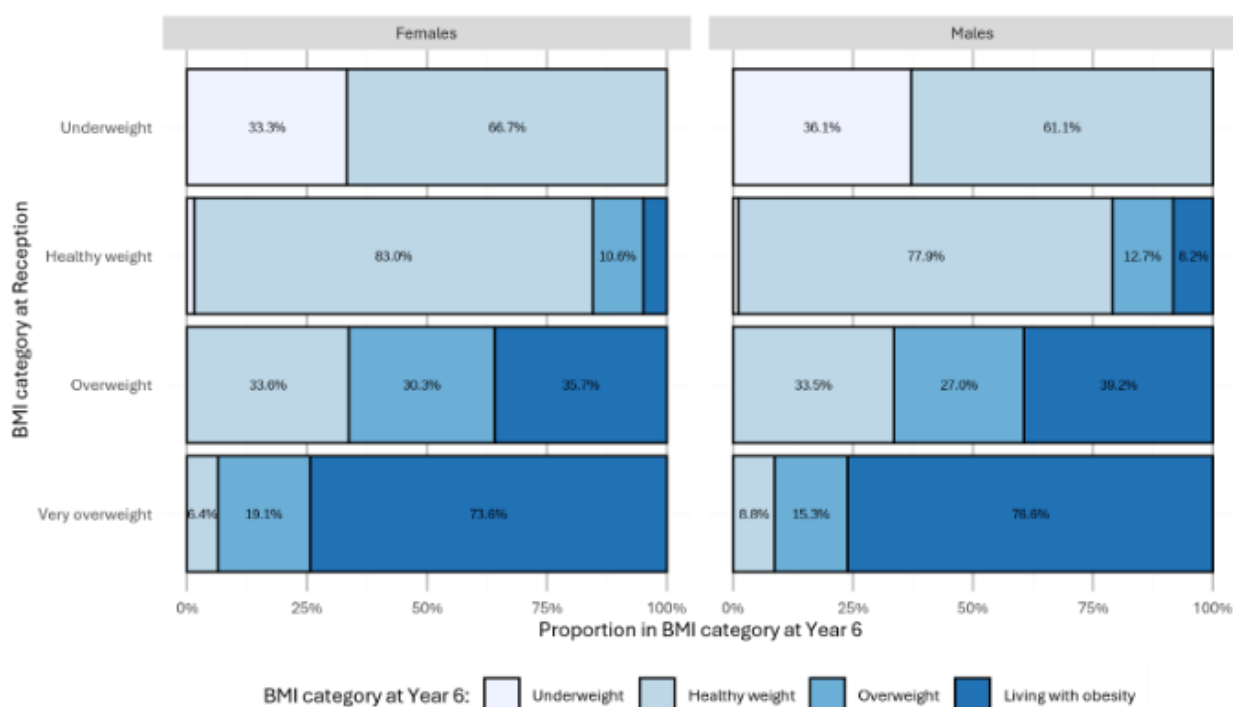
Healthy weight	1,235	95	7.7%	6.4%	9.4%
Overweight	1,235	210	17.0%	14.9%	19.0%
Very overweight	1,235	930	75.3%	72.9%	77.7%

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Source: Local analysis of NCMP data

Notes: Values denoted with '-' are based on counts of 0 to 7. All counts rounded to nearest 5.

- Like England, in West Sussex, a higher proportion of girls remained a healthy weight from Reception to Year 6 than boys (83.0% compared to 77.9%). Boys were also more likely to move from a healthy weight to a higher weight category than girls (20.9% of boys moved from healthy weight in Reception to overweight or obese in Year 6 compared to 15.5% of girls). There was no difference by sex among those remaining overweight or obese from Reception to Year 6 (74.7% for both sexes). Figure 35 shows the proportion of boys and girls in each weight category at Year 6 by children's weight category at Reception.

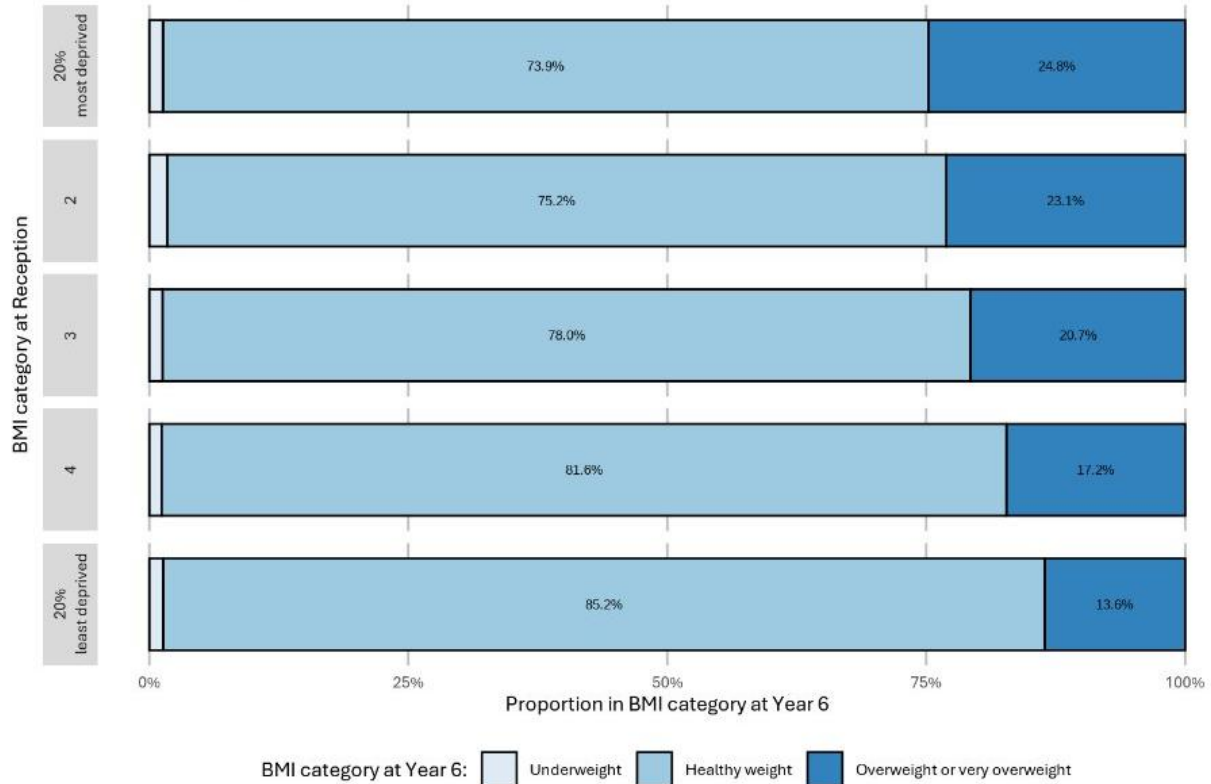


Source: Local analysis of NCMP data.

Notes. Proportions based on counts less than 8 are suppressed. Labels for proportions less than 5% are not shown. Excludes children who may live within West Sussex but attend schools outside the county. Only includes children with valid measurements at both Reception and Year 6.

Figure 35. Change in BMI category among West Sussex pupils from Reception to Year 6 by sex (Includes children in Reception in 2013/14 to 2017/18).

- Figure 36 shows the change in weight category at Year 6 among pupils who were a healthy weight in Reception by national deprivation quintiles. A social gradient is evident, with a smaller proportion of pupils living in areas among the 20% most deprived remaining a healthy weight at Year 6. A quarter of pupils living in areas among the 20% most deprived in England moved from a healthy weight in Reception to overweight or obese in Year 6. In the least deprived quintile, this value was 13.6%.

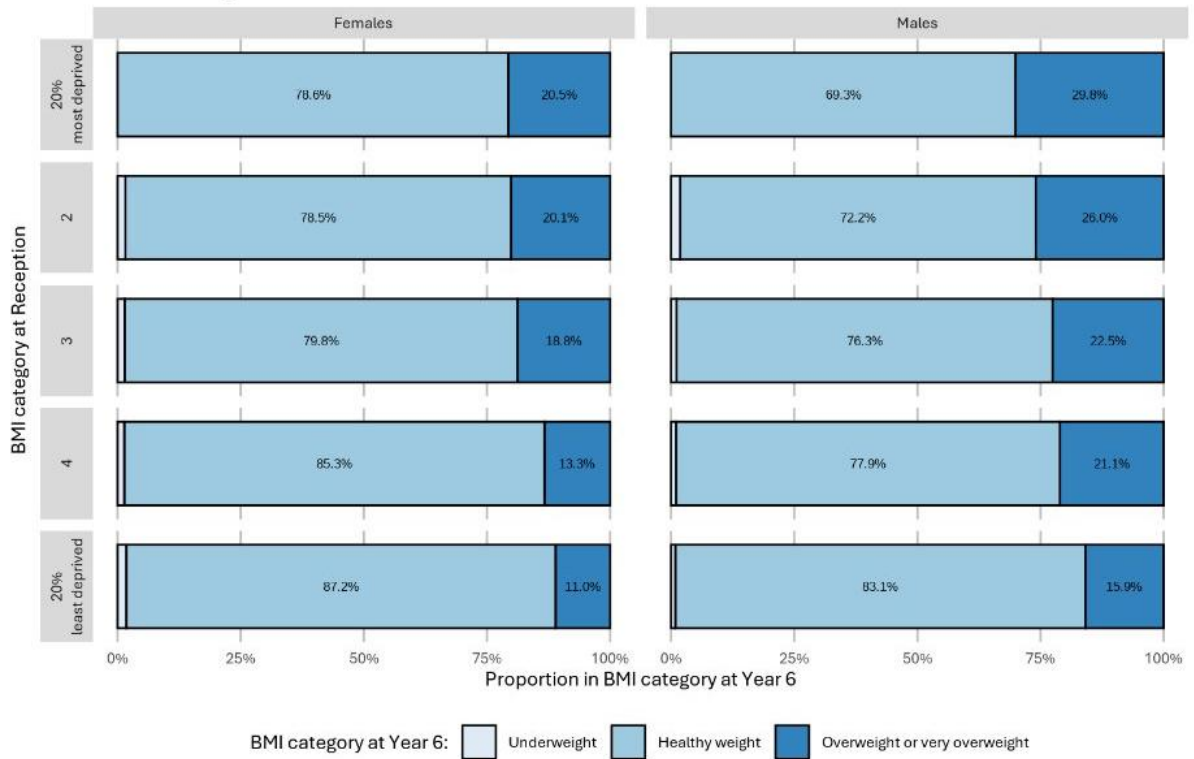


Source: Local analysis of NCMP data.

Notes. Proportions based on counts less than 8 are suppressed. Labels for proportions less than 5% are not shown. Excludes children who may live within West Sussex but attend schools outside the county. Only includes children with valid measurements at both Reception and Year 6.

Figure 36. Change in BMI category among West Sussex pupils from Reception to Year 6 by national Index of Multiple Deprivation (2019) quintile (Includes children in Reception in 2013/14 to 2017/18).

- Figure 37 shows change in BMI category at Year 6 among pupils who were a healthy weight in Reception, by national deprivation quintile and sex. In some cases, these proportions are based on smaller counts. This is particularly true of quintile 1 (20% most deprived). Across both sexes, a social gradient can be seen, with lower proportions of children who live in areas among the most deprived in England remaining a healthy weight at Year 6. For both sexes, the proportion of pupils living in the most deprived areas who moved from a healthy weight to overweight or obese is nearly twice that of the least deprived quintile. Proportions of pupils moving from a healthy weight to overweight or obese are higher among boys than girls across all quintiles.



Source: Local analysis of NCMP data.

Notes. Proportions based on counts less than 8 are suppressed. Labels for proportions less than 5% are not shown. Excludes children who may live within West Sussex but attend schools outside the county. Only includes children with valid measurements at both Reception and Year 6.

Figure 37. Change in BMI category among West Sussex pupils from Reception to Year 6 by national Index of Multiple Deprivation (2019) quintile and sex.

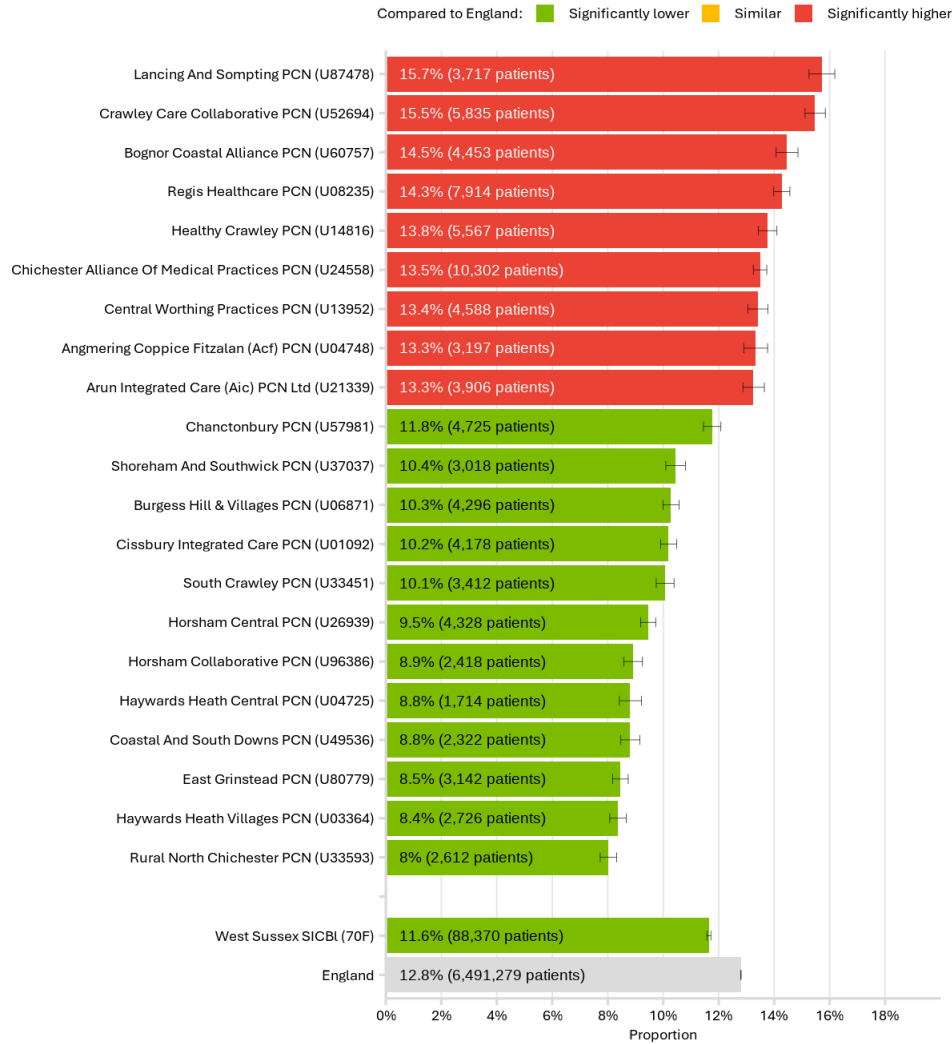
## **Excess weight prevalence in adults in West Sussex**

In West Sussex in 2023/24, estimates from Sport England's Active Lives Adult Survey data (using adjusted self-reported height and weight) suggest that nearly two thirds of adults (18 years and above) are overweight or obese (63.4%). This figure is slightly lower than for England overall (64.5%).

Quality and Outcomes Framework (QOF) data for 2023/24 found that 88,370 patients aged 18 years and over in West Sussex were living with obesity (11.6%). While the prevalence in West Sussex is lower than England overall (12.8%) there is variation by Primary Care Network (PCN), with the prevalence in nine PCN's in West Sussex significantly higher than England overall:

- Lancing and Sompting (15.7%)
- Crawley Care Collaborative (15.5%)
- Bognor Coastal Alliance (14.5%)
- Regis Healthcare (14.3%)
- Healthy Crawley (13.8%)
- Chichester Alliance of Medical Practices (13.5%)
- Central Worthing Practices (13.4%)
- Angmering Coppice Fitzalan (13.3%)
- Arun Integrated Care (13.3%)

The prevalence of obesity among adults aged 18 years and over by West Sussex Primary Care Networks and West Sussex Sub ICB locations compared to England is shown in Figure 38.



\*Definition - a register of patients aged 18 years or over living with obesity, appropriately adjusted for ethnicity in line with NICE guidelines – either with a BMI  $\geq 30$  in the preceding 12 months, or a BMI greater than or equal to 27.5kg/m<sup>2</sup> recorded in the preceding 12 months for patients with a South Asian, Chinese, other Asian, Middle Eastern, Black African or African-Caribbean family background.

Figure 38. Prevalence of obesity\* among adults aged 18 years and over; West Sussex Primary Care Networks and West Sussex Sub ICB location compared to England (GP registered population). Source: Quality Outcome Framework (QOF), 2023/24.

In West Sussex in 2023/24, obesity in early pregnancy was nearly one in four (24.3%), again slightly lower than for England overall (26.2%).

Body mass index category specifically among older adults are presented in Chapter 5.

Unlike the National Child Measurement Programme (NCMP), populational level data on overweight and obesity among adults are not routinely collected, with BMI estimates taken from surveys such as the Active Lives Adult Survey or the Health Survey for England.

## Trends in excess weight prevalence in adults

Although lower than England overall, the prevalence of overweight and obesity among adults living in West Sussex has been gradually increasing over time (Figure 39).

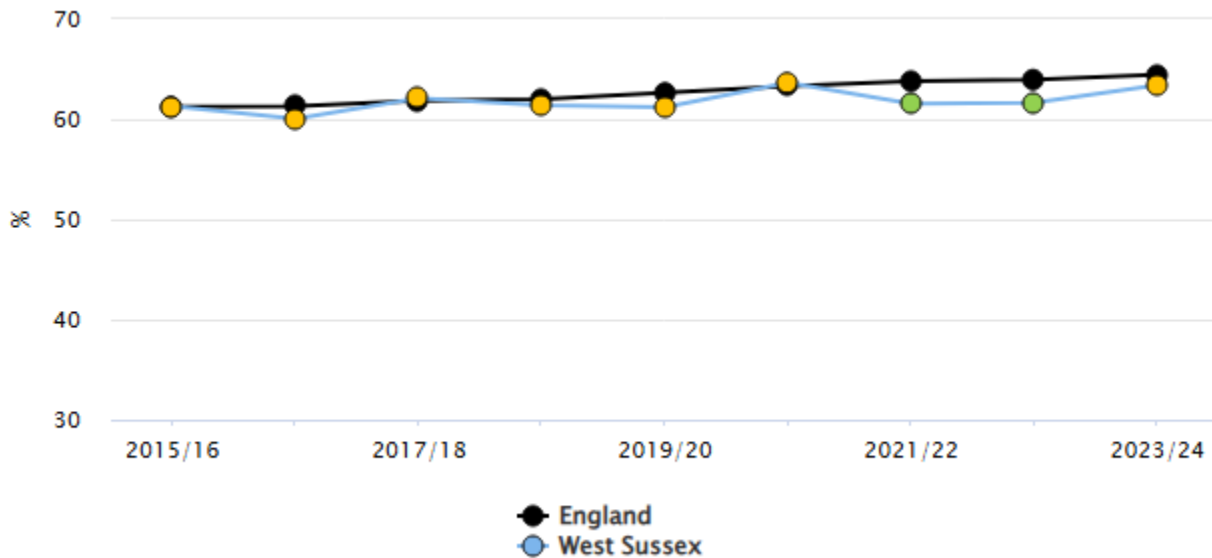


Figure 39: Overweight (including obesity) prevalence in adults aged 18 years and over in England and West Sussex. Source: OHID, Fingertips, based on Sport England data.

A recent forecasting study estimated that the prevalence of overweight and obesity in the UK by 2050 will be 72.6% for females and 79.6% for males<sup>74</sup>.

## Inequalities in excess weight in children and adults in West Sussex and nationally

Data describing inequalities in excess weight at the West Sussex level are limited. Where local data are available, these are provided with comparisons to the national average. National estimates are provided where local data are not available.

## Inequalities in excess weight by ethnicity

NCMP data from 2023/24 show that nationally, Reception age children from Black ethnic groups (Black African: 27.4%; Black Caribbean: 25.1%; any other Black background: 26.2%) are significantly more likely to be overweight or obese compared to England overall (22.1%), as are children from White British (23.3%) and White Irish ethnic groups (26.7%). Children from Asian ethnic groups are significantly less likely to be overweight or obese compared to England overall (Bangladeshi: 18.6%; Chinese: 10.3%; Indian: 11.8%; Any other Asian background: 17.6%), as are children from other White (20.5%) or mixed backgrounds (20.8%) (Figure 40).

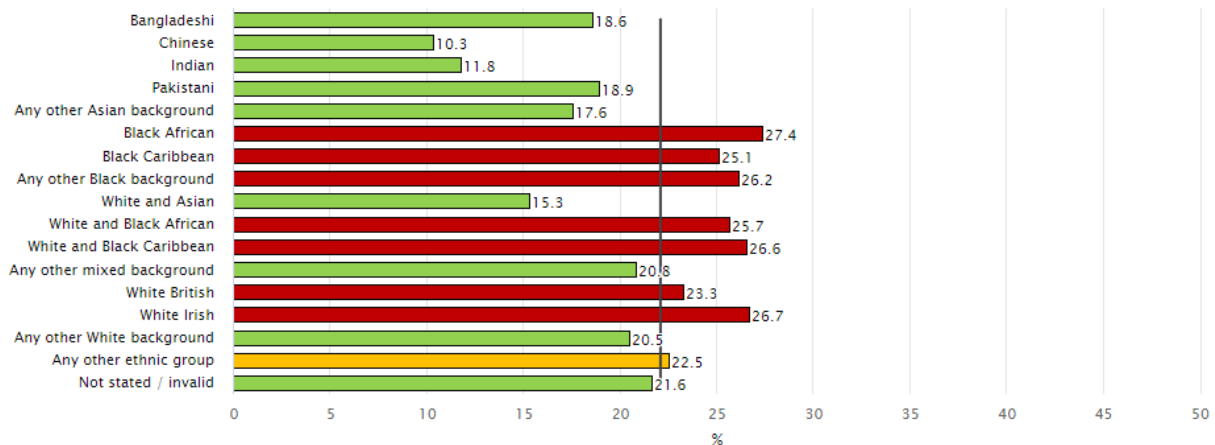
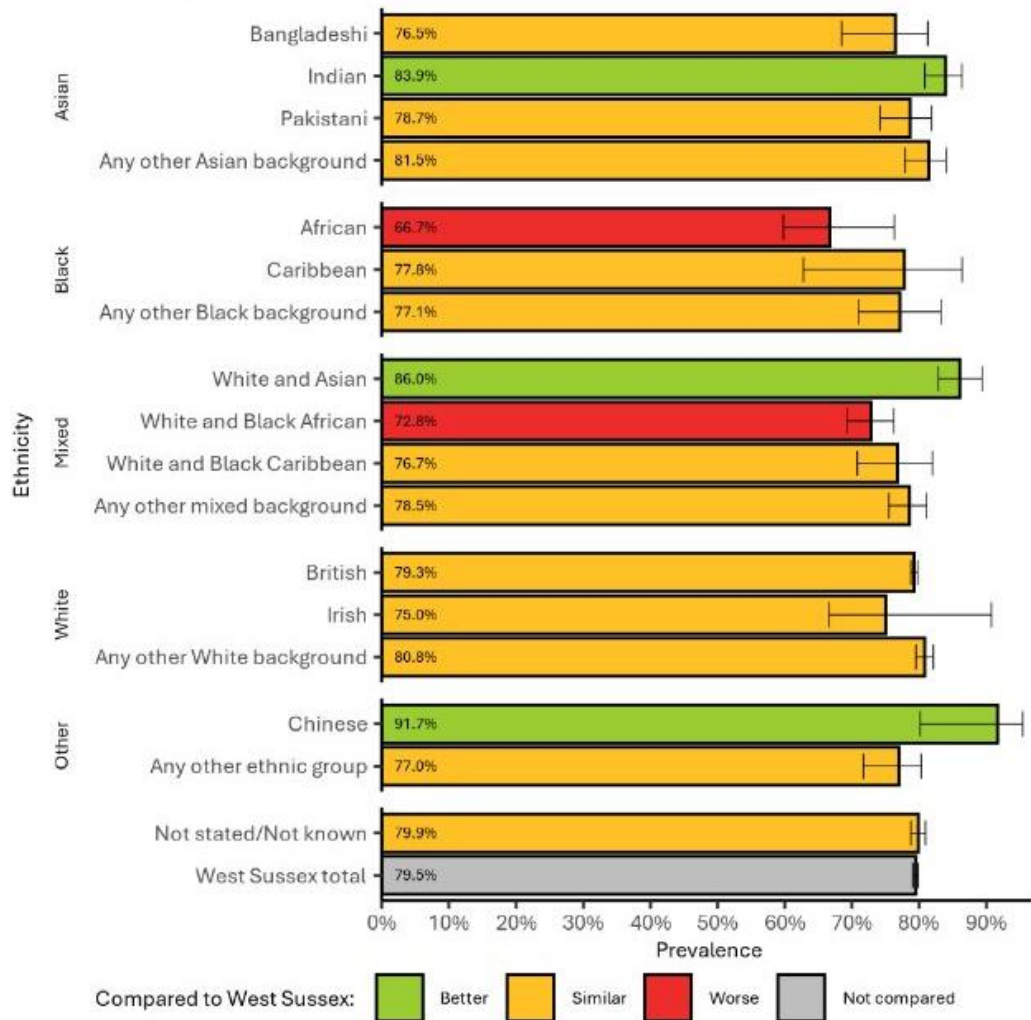


Figure 40. Childhood overweight (including obesity) prevalence by ethnicity in Reception (4-5 years), England 2023/24. Source: National Child Measurement Programme, OHID, Fingertips).

In West Sussex across a five-year period (2018/19 to 2023/24)<sup>vii</sup>, prevalence of healthy weight among Reception age children was lowest among Black African children (66.7%) and highest for Chinese children (91.7%). The estimated prevalence of healthy weight was significantly lower than the 5-year average for West Sussex (79.5%) for Black African Children (66.7%) and White and Black African Children (72.8%). The estimated prevalence of healthy weight was significantly higher than the 5-year average for West Sussex for children from Indian (83.9%), White and Asian (86%) and Chinese (91.7%) ethnic backgrounds. Among White British children the estimated prevalence of healthy weight was similar to West Sussex overall (79.3%) (see Figure 41).

<sup>vii</sup> Five years of data were combined to improve reliability. Healthy weight prevalence is reported as counts are larger. Some records do not have ethnicity stated/recorded. Data completeness has generally improved over time (37% of records without ethnicity in 2018/19, falling to between 2-7% of records from 2021/22 onwards). Counts are small for some ethnic groups.



Note. If no data is given, prevalence has been suppressed due to small counts.  
 Children who attend schools outside of West Sussex but live within the county are excluded.  
 Due to the COVID-19 pandemic, data for 2020/21 is excluded from the 5-year window, with 2018/19 used in preference.

Figure 41. Prevalence of healthy weight among children in Reception (4-5 year olds) in West Sussex by ethnicity; 2018/19 to 2023/24. Source: Local analysis of NCMP data.

At Year 6, children from all Black ethnic groups continue to be significantly more likely to be overweight or obese (Black African: 46%; Black Caribbean: 45.6%; Any other Black background: 45.7%), however children from White British (34.1%) and White Irish backgrounds (33.2%) are significantly less likely to be overweight or obese compared to England overall (35.8%). At Year 6, children from Bangladeshi (44.3%), Pakistani (40.7%) and other Asian backgrounds (37.9%) are significantly more likely to be overweight or obese, with only children from Chinese (24.5%), Indian (34.8%) and White and Asian ethnic groups (30.5%) remaining significantly less likely to be overweight or obese compared to England overall. Children from other White backgrounds (36.3%) and other ethnic groups (40.3%) are also significantly more likely to be overweight or obese (see Figure 42).

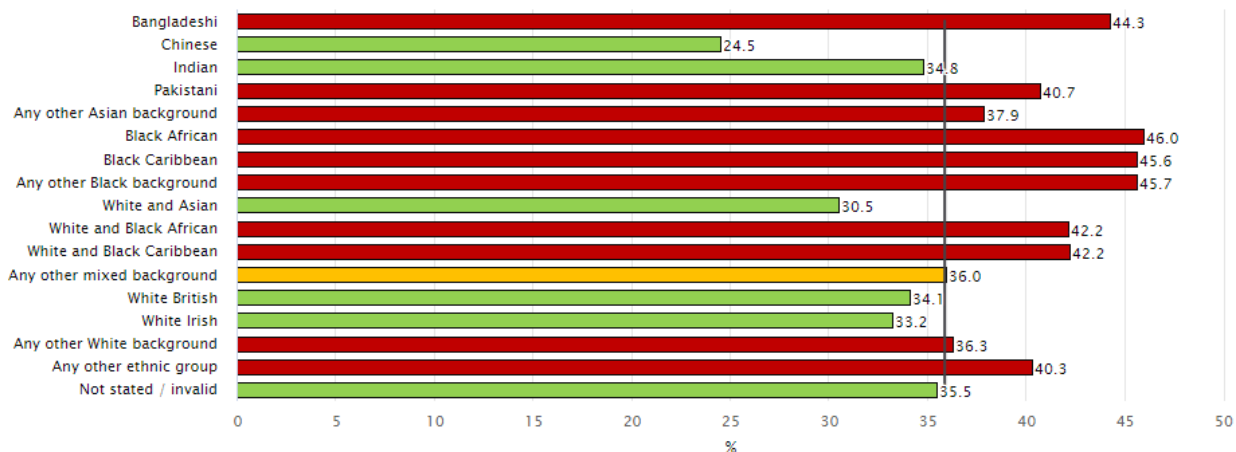


Figure 42. Childhood overweight (including obesity) prevalence by ethnicity in Year 6, England 2023/24. Source: National Child Measurement Programme, OHID, Fingertips).

In West Sussex across a five-year period (2018/19 to 2023/24)<sup>viii</sup>, prevalence of healthy weight among children in Year 6 was lowest among Bangladeshi children (46.6%) and highest for Chinese children (75%). The estimated prevalence of healthy weight was significantly lower than the 5-year average for West Sussex (66.5%) for:

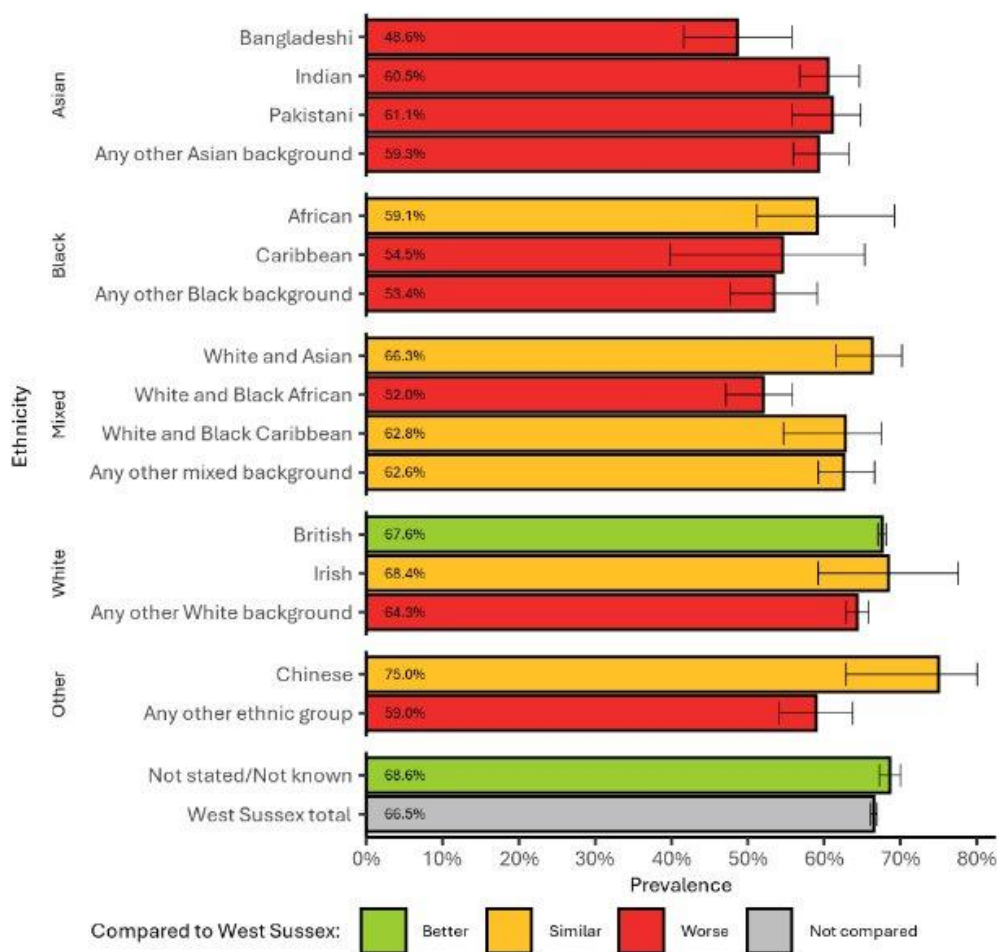
- Children with an Asian ethnicity, which includes those from Bangladeshi (46.6%), Indian (60.5%), and Pakistani (61.1%) ethnic backgrounds and children from any other Asian background (59.3%)
- Black Caribbean children (54.5%) and children from any other Black background (53.4%)
- White and Black African children (52%)
- Children from any other White background (64.3%)
- Children from any other ethnic group (59%)

The estimated prevalence of healthy weight among White British children (67.6%) and those whose ethnicity was not stated or known (68.6%) was significantly higher than the 5-year average for West Sussex.

<sup>viii</sup> Five years of data were combined to improve reliability. Healthy weight prevalence is reported as counts are larger. Some records do not have ethnicity stated/recorded. Data completeness has generally improved over time (37% of records without ethnicity in 2018/19, falling to between 2-7% of records from 2021/22 onwards). Counts are small for some ethnic groups.

Prevalence of healthy weight among children in Year 6 (10 to 11 yr olds) in West Sussex by ethnicity; 2019/20 to 2023/24

Source: Local analysis of NCMP data



Note. If no data is given, prevalence has been suppressed due to small counts. Children who attend schools outside of West Sussex but live within the county are excluded. During the COVID-19 pandemic (2020/21 academic year), mass school closures meant NCMP was incomplete in many local authorities in England. However in West Sussex, the number of year 6 children measured was 75% or more compared to the average number in the previous 3 years. West Sussex data for Year 6 is considered robust and reliable for 2020/21.

Figure 43. Prevalence of healthy weight among children in Year 6 (10-11 year olds) in West Sussex by ethnicity; 2019/20 to 2023/24.

Among adults, data from 2023/24 show that nationally, those from Black and White British ethnic groups are more likely to be overweight or obese than England overall, with those from Asian, Chinese, Mixed, White Other and Other ethnic groups less likely to be overweight or obese than England overall (see Figure 44).

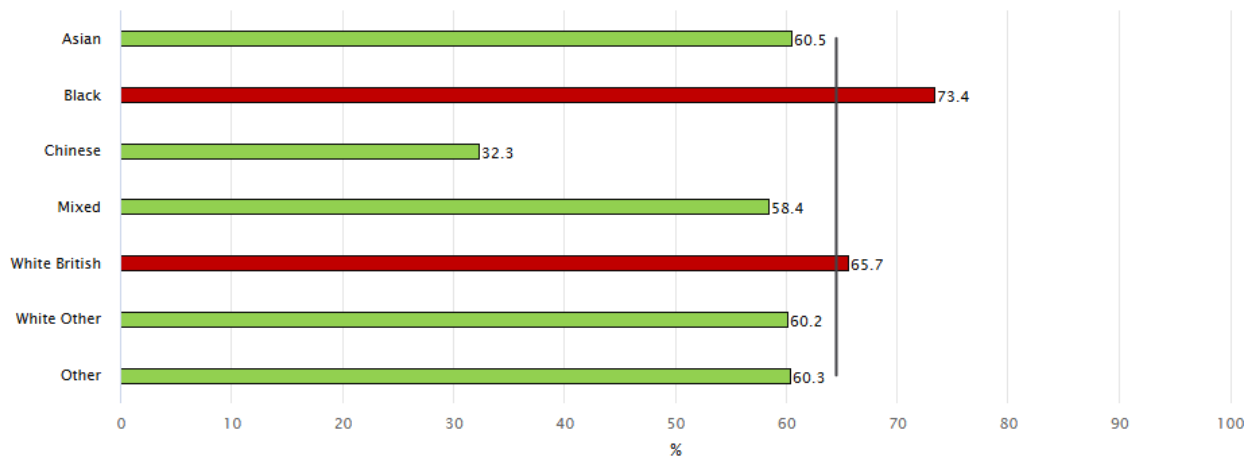
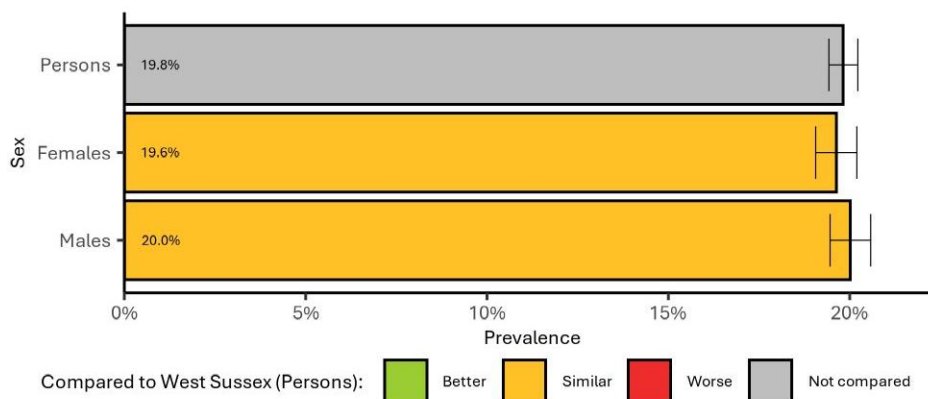


Figure 44. Overweight (including obesity) prevalence in adults by ethnic group, England 2023/24. Source: OHID, Fingertips, based on Sport England data.

### Inequalities in excess weight by sex

NCMP data from 2023/24 show that nationally, in both Reception and in Year 6, boys are significantly more likely to be overweight or obese (Reception: 22.2%, Year 6: 38.1%), and girls are significantly less likely to be overweight or obese (Reception: 21.9%, Year 6: 33.5%), compared to England overall (22.1%).

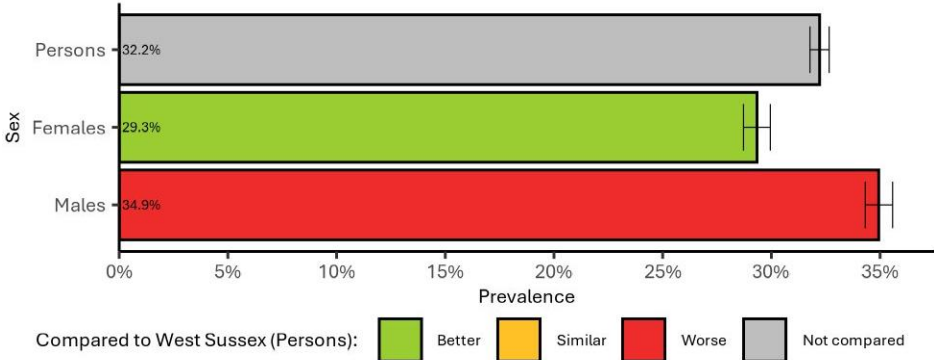
In West Sussex, among Reception aged children using pooled data across five years, prevalence of excess weight among Reception aged children did not differ by sex. In 2019/20 to 2023/24, 20% of boys were overweight or obese compared to 19.6% of girls (see Figure 45).



Note. If no data is given, prevalence has been suppressed due to small counts.  
 Children who attend schools outside of West Sussex but live within the county are excluded.  
 Due to the COVID-19 pandemic, data for 2020/21 is excluded from the 5-year window, with 2018/19 used in preference.

Figure 45. Prevalence of overweight or very overweight among children in Reception (4-5 year olds) in West Sussex by sex, 2018/19 to 2023/24. Source: Local analysis of NCMP data.

By Year 6, prevalence of excess weight was higher among boys than girls. In 2019/20 to 2023/24, 34.9% of boys were overweight or obese compared to 29.3% of girls.



Note. If no data is given, prevalence has been suppressed due to small counts. Children who attend schools outside of West Sussex but live within the county are excluded. During the COVID-19 pandemic (2020/21 academic year), mass school closures meant NCMP was incomplete in many local authorities in England. However in West Sussex, the number of year 6 children measured was 75% or more compared to the average number in the previous 3 years. West Sussex data for Year 6 is considered robust and reliable for 2020/21.

Figure 46. Prevalence of overweight or very overweight among children in Year 6 (10-11 year olds) in West Sussex by sex; 2019/20 to 2023/24. Source: Local analysis of NCMP data.

This trend continues into adulthood. Data from 2023/24 found that males were significantly more likely to be overweight (69.7%) and women were significantly less likely to be overweight (59.2%) compared to England overall.

### Inequalities in excess weight by deprivation

NCMP data from 2023/24 show that nationally, for both Reception age (Figure 47) and Year 6 children (Figure 48), there is a social gradient in obesity prevalence. Children living in the four most deprived deciles are significantly more likely to be overweight compared to England overall, while children living in the fifth least deprived quintiles are significantly less likely to be overweight. The prevalence of overweight and obesity among those living in the fifth most deprived decile was similar to England.

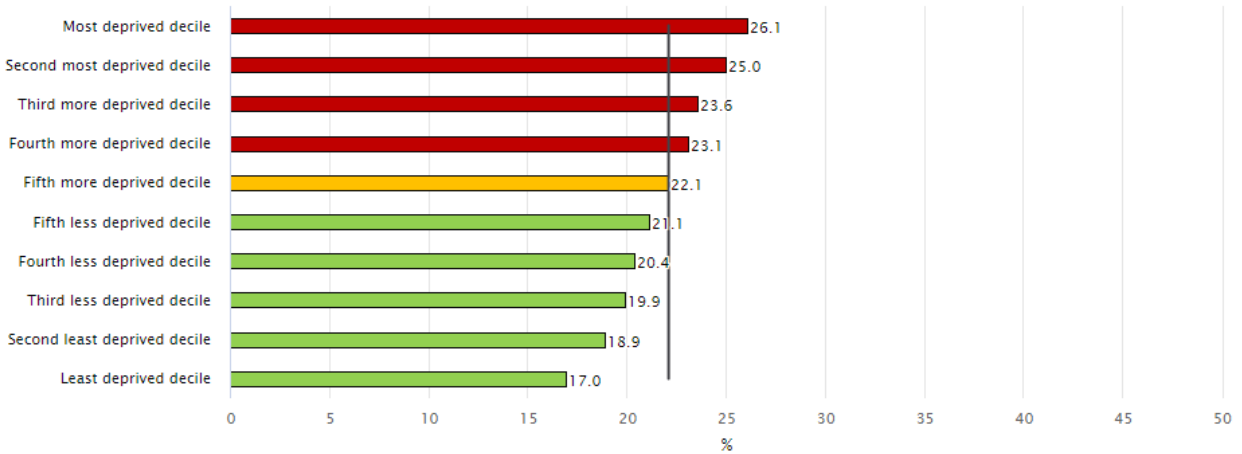


Figure 47. Childhood overweight and obesity prevalence by deprivation decile in Reception, England, 2024. Source: National Child Measurement Programme, OHID, Fingertips).

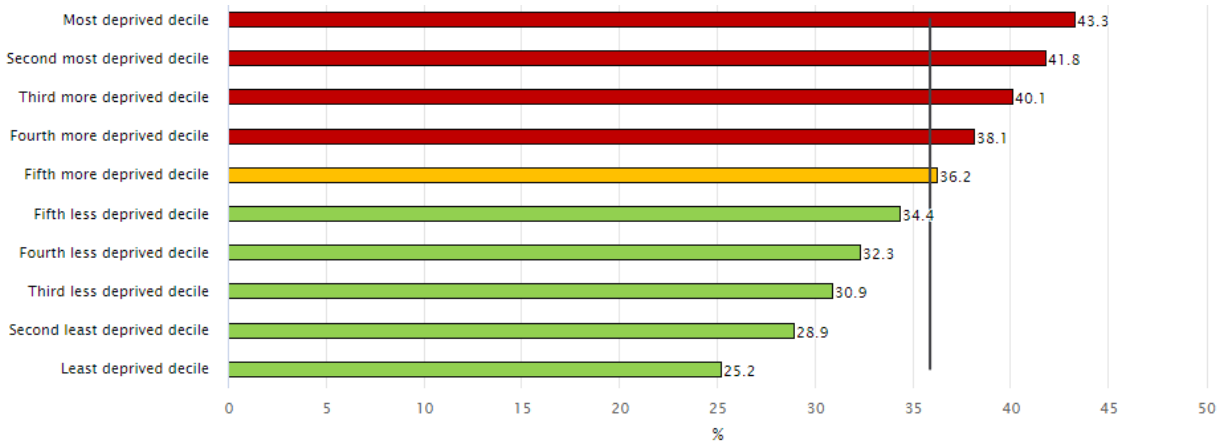
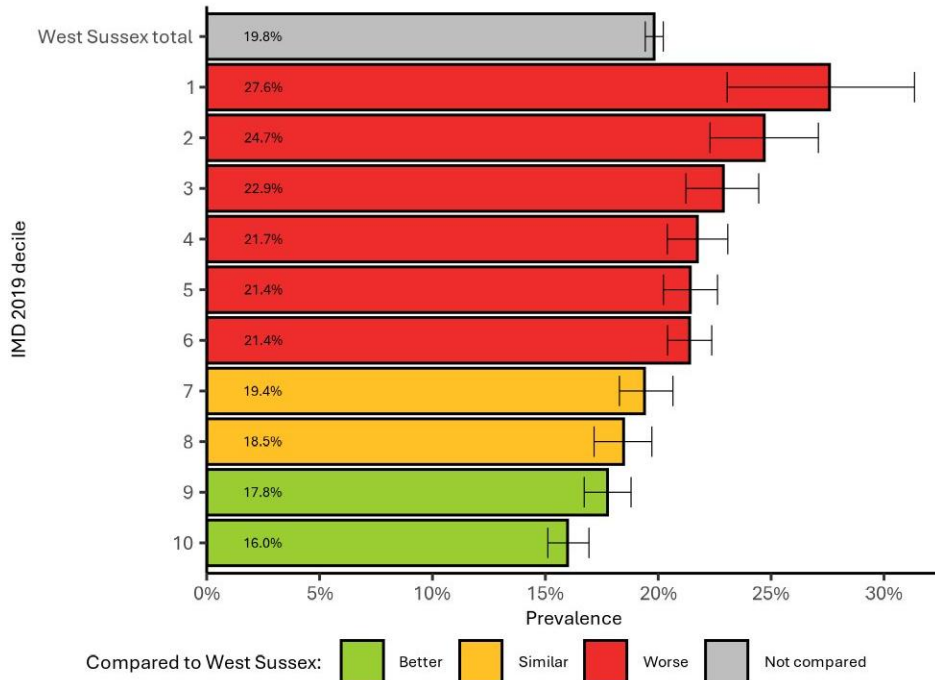


Figure 48. Childhood overweight and obesity prevalence by deprivation decile in Year 6, England, 2024. Source: National Child Measurement Programme, OHID, Fingertips).

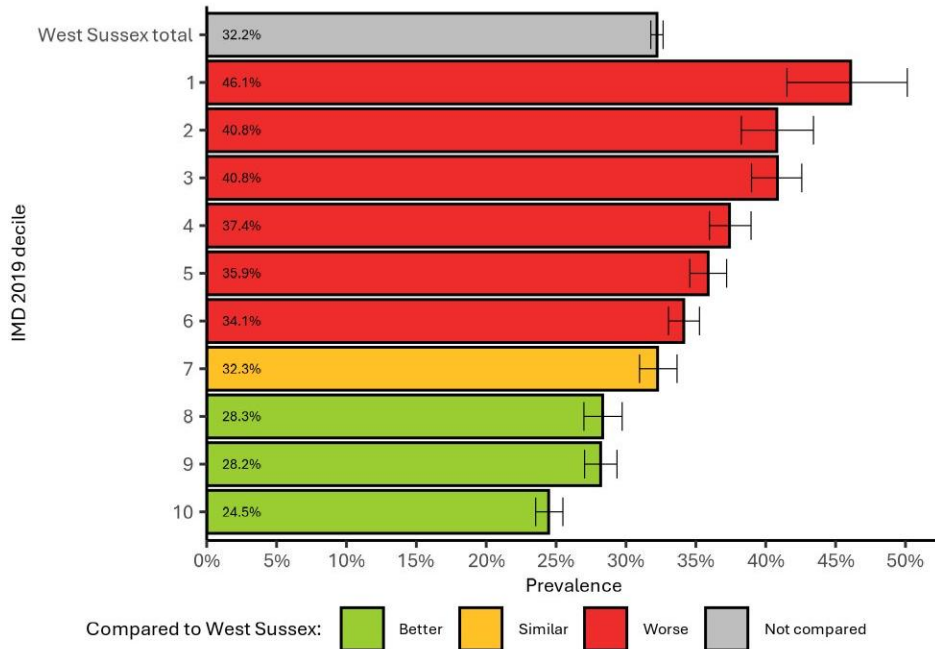
In West Sussex, overweight and obesity is also strongly associated with deprivation, with the prevalence of excess weight highest among children living in more deprived deciles and lowest for those in the least deprived deciles. Using data pooled across 5-years<sup>ix</sup>, the prevalence of excess weight was 1.7 times higher for Reception aged children (Figure 49) and 1.9 times higher for children in Year 6 (see Figure 50) living in areas of West Sussex among the 10% most deprived areas in England, compared with areas among the 10% least deprived.

<sup>ix</sup> Data pooled across 5-years due to small counts. The number of children in each decile varies, with fewer small areas of West Sussex among the least deprived deciles in England.



Note. If no data is given, prevalence has been suppressed due to small counts.  
 Decile is determined based on the postcode of the child.  
 Children who attend schools outside of West Sussex but live within the county are excluded.  
 Due to the COVID-19 pandemic, data for 2020/21 is excluded from the 5-year window, with 2018/19 used in preference.

Figure 49. Prevalence of overweight or very overweight among children in Reception (4-5 year olds) in West Sussex by Index of Multiple Deprivation (2019) deciles; 2018/19 to 2023/24. Source: Local analysis of NCMP data.



Note. If no data is given, prevalence has been suppressed due to small counts.  
 Decile is determined based on the postcode of the child.  
 Children who attend schools outside of West Sussex but live within the county are excluded.  
 During the COVID-19 pandemic (2020/21 academic year), mass school closures meant NCMP was incomplete in many local authorities in England. However in West Sussex, the number of year 6 children measured was 75% or more compared to the average number in the previous 3 years. West Sussex data for Year 6 is considered robust and reliable for 2020/21.

Figure 50. Prevalence of overweight or very overweight among children in Year 6 (10-11 year olds) in West Sussex by Index of Multiple Deprivation (2019) deciles; 2018/19 to 2023/24. Source: Local analysis of NCMP data.

At a national level, a similar picture was seen among adults in 2023/24, with those living in the three most deprived deciles and the fifth most deprived decile significantly more likely to be overweight or obese compared to England overall, and those living in the five least deprived deciles significantly less likely to be overweight or obese. The prevalence of overweight and obesity among those living in the fourth most deprived decile was similar to England (see Figure 51).

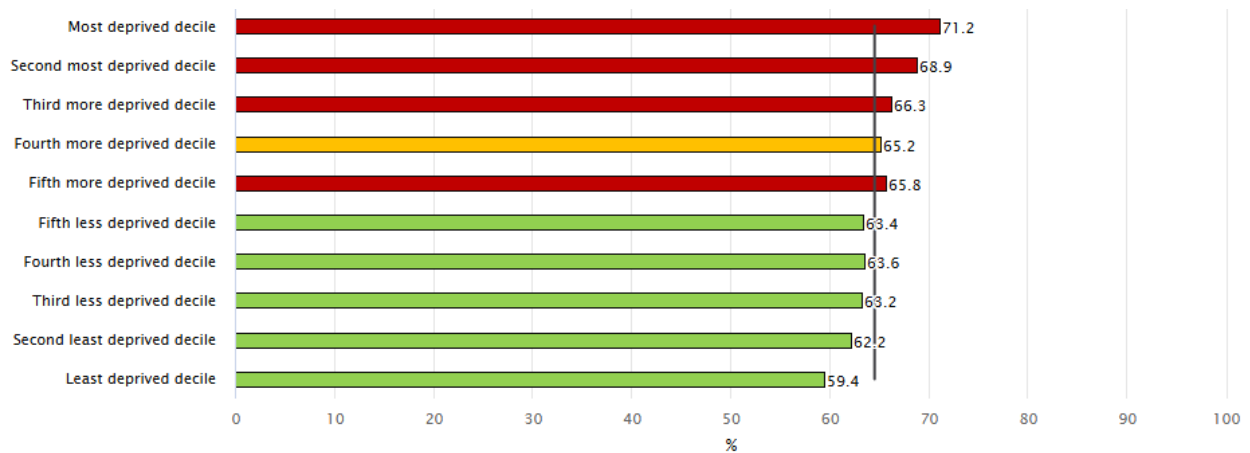


Figure 51. Overweight and obesity prevalence by deprivation decile among adults, England, 2023/24. Source: OHID, Fingertips, based on Sport England data.

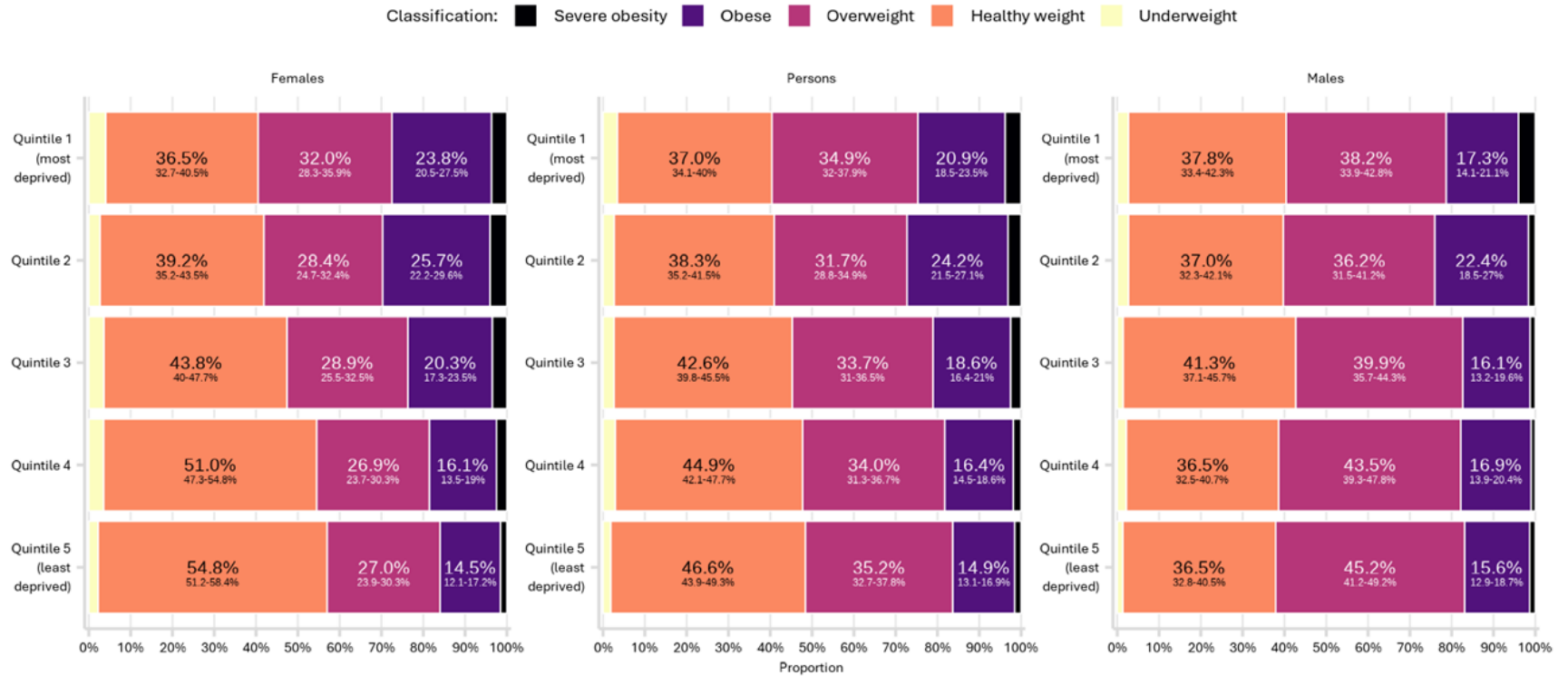
This social gradient is broadly reflected in West Sussex in the results of the 'Your Health Matters' community survey, which was conducted in 2024 with over 6,400 West Sussex residents. This local data shows a gap in healthy weight and obesity between the most and least deprived areas overall, but highlights variation in BMI classification by deprivation level and sex:

- The proportion of respondents with a healthy weight was lowest in the most deprived quintile (37.0%) and highest in the least deprived (46.6%). Lower rates of healthy weight among the most deprived were due to obesity, rather than overweight.
- Among the most deprived areas, rates of obesity were significantly higher (20.9% and 24.2% in quintiles 1 and 2, respectively) compared to the least deprived (14.9% in quintile 5).
- Although a social gradient in BMI was evident for female respondents, this was not observed amongst males. There was no significant difference in the percentage of men who were obese in the most deprived areas compared with the least deprived areas (Figure 52).

**BMI classification prevalence by deprivation quintile (nationally ranked) and sex; West Sussex**

Your Health Matters; 2024 unweighted data

95% confidence intervals shown in parentheses beneath prevalence



\* excludes where BMI could not be calculated/was unknown.

Persons includes those who reported their sex as either 'Other', 'Prefer not to say', or 'Don't know'

Figure 52. Body-mass index (BMI) classifications by deprivation quintile and sex in West Sussex residents. Source: Your Health Matters, 2024.

### Inequalities in excess weight by geography – coastal communities

Local analysis of the health and wellbeing of coastal communities in West Sussex, using NCMP data, shows that the prevalence of healthy weight among 10-11 year olds is significantly lower in coastal West Sussex towns compared with non-coastal towns. During 2018/19 to 2022/23, the estimated prevalence of healthy weight in Year 6 children in West Sussex coastal towns was 64.3%, compared to 68.3% in non-coastal towns and 67.1% in West Sussex overall. During the same period, a fifth of Year 6 children measured in West Sussex coastal towns were very overweight (20.1%). This is significantly higher than the estimated prevalence of obesity in West Sussex non-coastal towns (16.7%) and the county average (17.6%)<sup>75</sup>.

### Inequalities in excess weight by disability

Individuals with disabilities are significantly more likely to be overweight or obese (72.5%), while non-disabled individuals are significantly less likely to be overweight or obese (62.2%), compared to England overall (64.5%) (2023/24 data) (Figure 53). The trend is also on an upward trajectory.

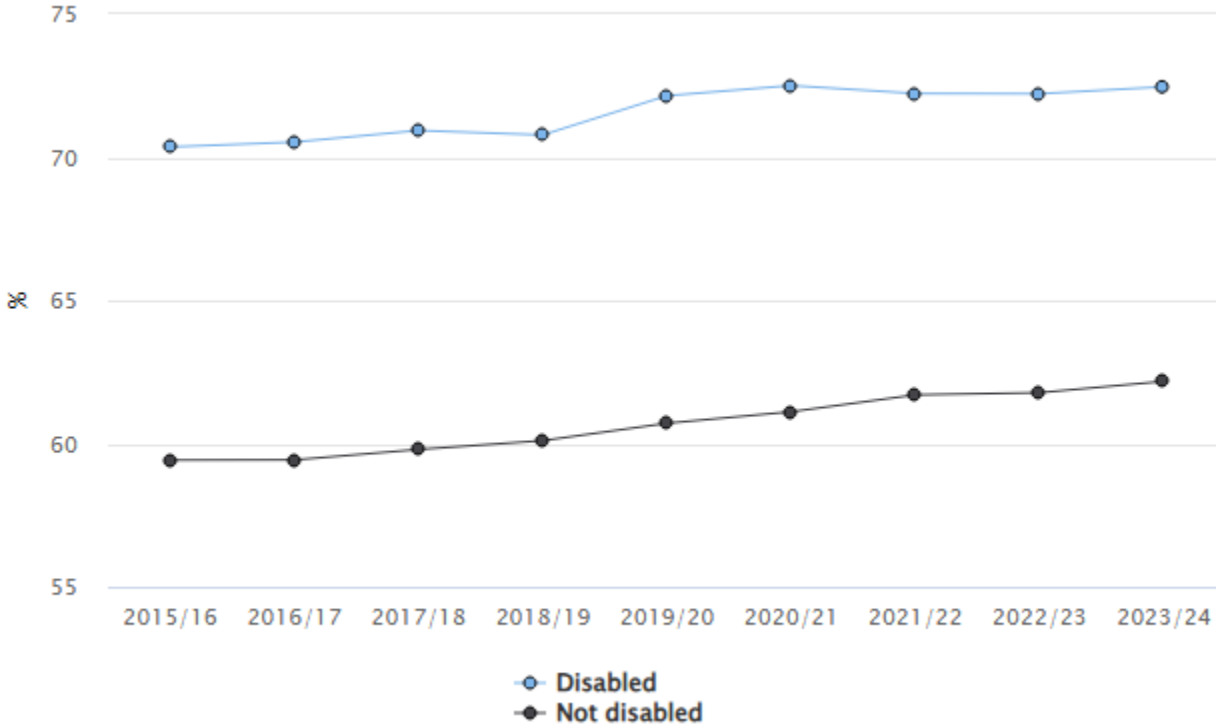


Figure 53. Overweight (including obesity) prevalence by disability status among adults, England. Source: OHID, Fingertips, based on Sport England data.

## Inequalities in excess weight by education

Adults with no qualifications are significantly more likely to be overweight or obese compared to England overall (69.4%), while those who have a Level 4 or above qualification (Higher National Certificate, Higher National Diploma, Bachelor's degree, or post-graduate qualifications) are less likely to be overweight or obese compared to England overall (60.9%). Adults with Level 1 qualifications (one to four GCSE passes (grade A\* to C or grade 4 and above) or equivalent qualifications), Level 2 qualifications (five or more GCSE passes (grade A\* to C or grade 4 and above) or equivalent qualifications) or Level 3 qualifications (two or more A Levels or equivalent qualifications) are also more likely to be overweight or obese compared to England overall (Figure 54).

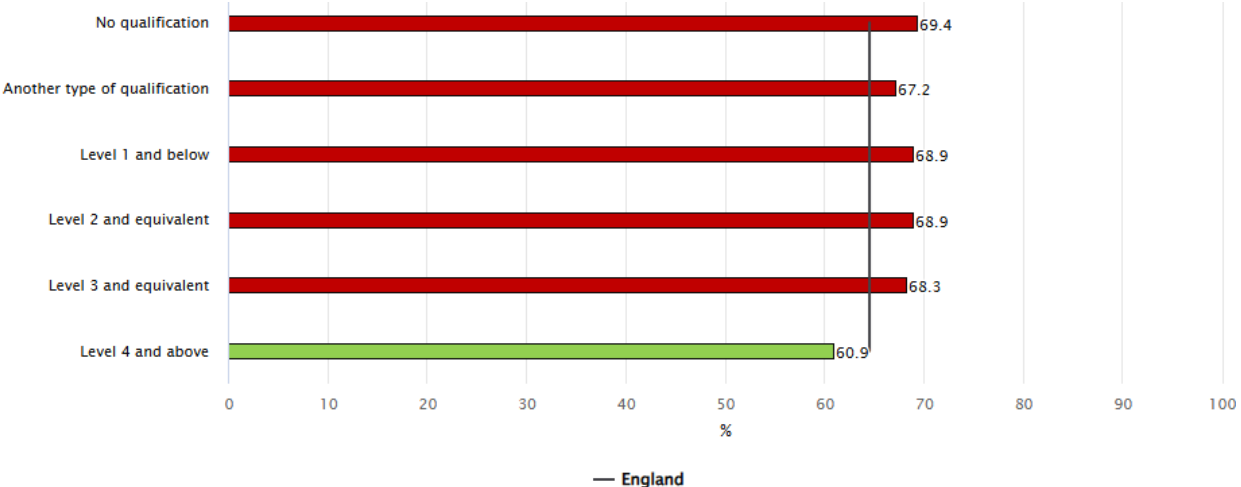


Figure 54. Overweight (including obesity) prevalence by level of education among adults, England, 2023/24. Source: OHID, Fingertips, based on Sport England data.



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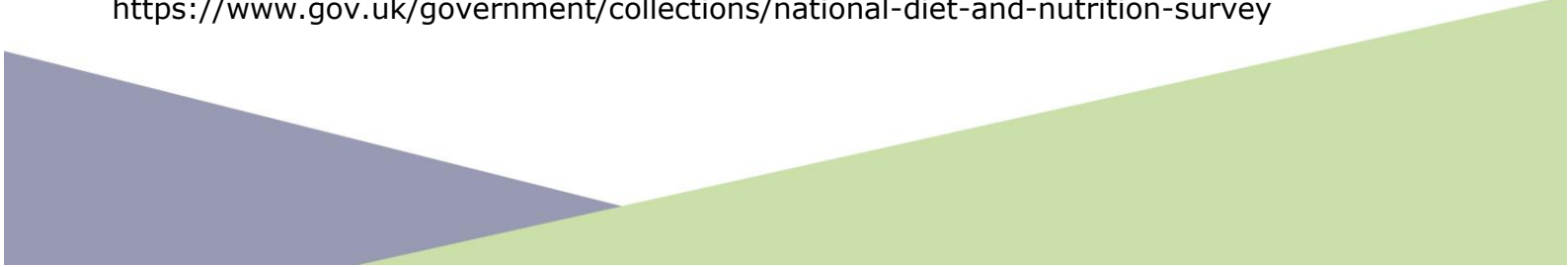
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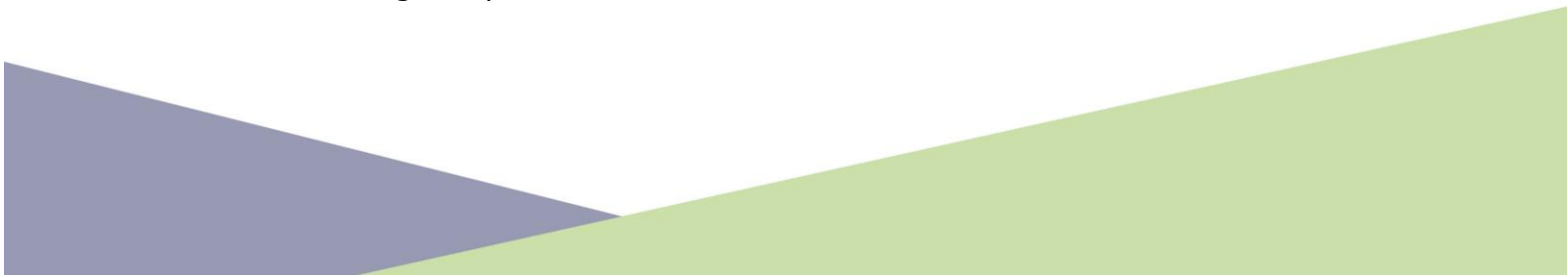
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