

TUNBRIDGE WELLS

National Child Measurement Programme: Further Analysis of the Drivers of Excess Weight

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| 1. Background

This paper provides a high level summary of the results of in-depth analyses exploring the drivers of excess weight among reception and year six children, a [full report](#) has been published.

The following analyses of local childhood weight data have also been produced:

- Local authority level [trend analysis of data up to 2015/16](#), with comparisons to Kent, the South East and England.
- Kent [analysis of the inequalities](#) in childhood obesity.

The above analyses have established that overweight and obesity prevalence is higher in children resident within areas of deprivation. Further, there is evidence for a widening gap in obesity prevalence between the most and the least deprived groups across Kent during 2008/09 to 2014/15.

The following paragraphs summarise the key findings from the [full report](#). Maps have also been presented for the LSOAs in Tunbridge Wells with the highest levels of excess weight¹ across Kent.

¹ defined as the upper quartile of excess weight across Kent between 2008/09 to 2014/15

| 2. Ethnicity

The association between deprivation and high levels of obesity and excess weight in childhood is well documented. There is also a strong body of evidence indicating that certain ethnic groups are at greater risk of excess weight.

Our analysis used statistical methods to enable comparison to White children and demonstrated **higher odds of excess weight among:**

- **Black children** within reception year in Kent
- **Black, Asian and Other² children** within year six in Kent

This remained even after accounting for deprivation.

We were able to show that the strength of the association between excess weight and Black populations varies across localities in Kent. The [full report](#) details the statistical methods used.

This identifies areas where:

- the **association** between black ethnicity and excess weight is **strong**
- and there is a **high** concentration of **black** individuals within the **population**.

KEY FOCUS:

Identifying these areas may help the effective targeting of public health interventions.

² Arab and any other ethnic category

| 3. Living Environment

There is a high level of interest in the influence of the living environment on excess weight. But, unpicking the key features of an obesogenic environment is challenging as the factors that guide food choice and physical activity are complex.

Using appropriate statistical techniques we were able to demonstrate **higher odds of excess weight** for areas with:

- **shorter distances to food outlets (takeaways)**
- **lower access to food supermarkets**

We also found **lower odds of excess weight** for areas with:

- **lower access to greenspace**
- **longer distances to public & private sports facilities**

But, all findings were only before adjustment for deprivation, ethnicity and urban/rural environment.

KEY FOCUS:

Locality mapping of the main assets and vulnerabilities may guide understanding of some of the possible determinants of obesity within the local context.

Table 1: Areas with highest levels of childhood excess weight.

Ward Code	Ward Name	LSOA Code	LSOA Name	IMD Kent weighted quintile	Mind the Gap Type	Upper quartile excess weight
E05005130	Benenden & Cranbrook	E01024788	Tunbridge Wells 013B	2		reception
		E01024791	Tunbridge Wells 013D	5		reception
E05005131	Brenchley & Horsmonden	E01024793	Tunbridge Wells 004A	4		reception
E05005132	Broadwater	E01024796	Tunbridge Wells 010B	2		year six
		E01024797	Tunbridge Wells 012A	5		reception
E05005133	Capel	E01024798	Tunbridge Wells 001A	4		reception/ year six
E05005134	Culverden	E01024801	Tunbridge Wells 008A	4		reception/ year six
		E01024802	Tunbridge Wells 008B	4		reception
E05005137	Hawkhurst & Sandhurst	E01024807	Tunbridge Wells 014B	3		reception/ year six
E05005138	Paddock Wood East	E01024813	Tunbridge Wells 001D	3		year six
E05005139	Paddock Wood West	E01024815	Tunbridge Wells 001F	2		reception/ year six
E05005140	Pantiles & St Mark's	E01024818	Tunbridge Wells 012C	5		reception
E05005142	Pembury	E01024826	Tunbridge Wells 004C	5		reception
E05005143	Rusthall	E01024830	Tunbridge Wells 010C	3		reception/ year six
E05005146	Sherwood	E01024840	Tunbridge Wells 005A	1		reception
		E01024841	Tunbridge Wells 005B	2		reception
		E01024842	Tunbridge Wells 005C	2		reception/ year six
E05005147	Southborough & High Brooms	E01024847	Tunbridge Wells 003D	3		reception
E05005148	Southborough North	E01024848	Tunbridge Wells 003E	3		reception
		E01024849	Tunbridge Wells 002D	5		reception

WARDS:

- Benenden & Cranbrook,
- Hawkhurst & Sandhurst

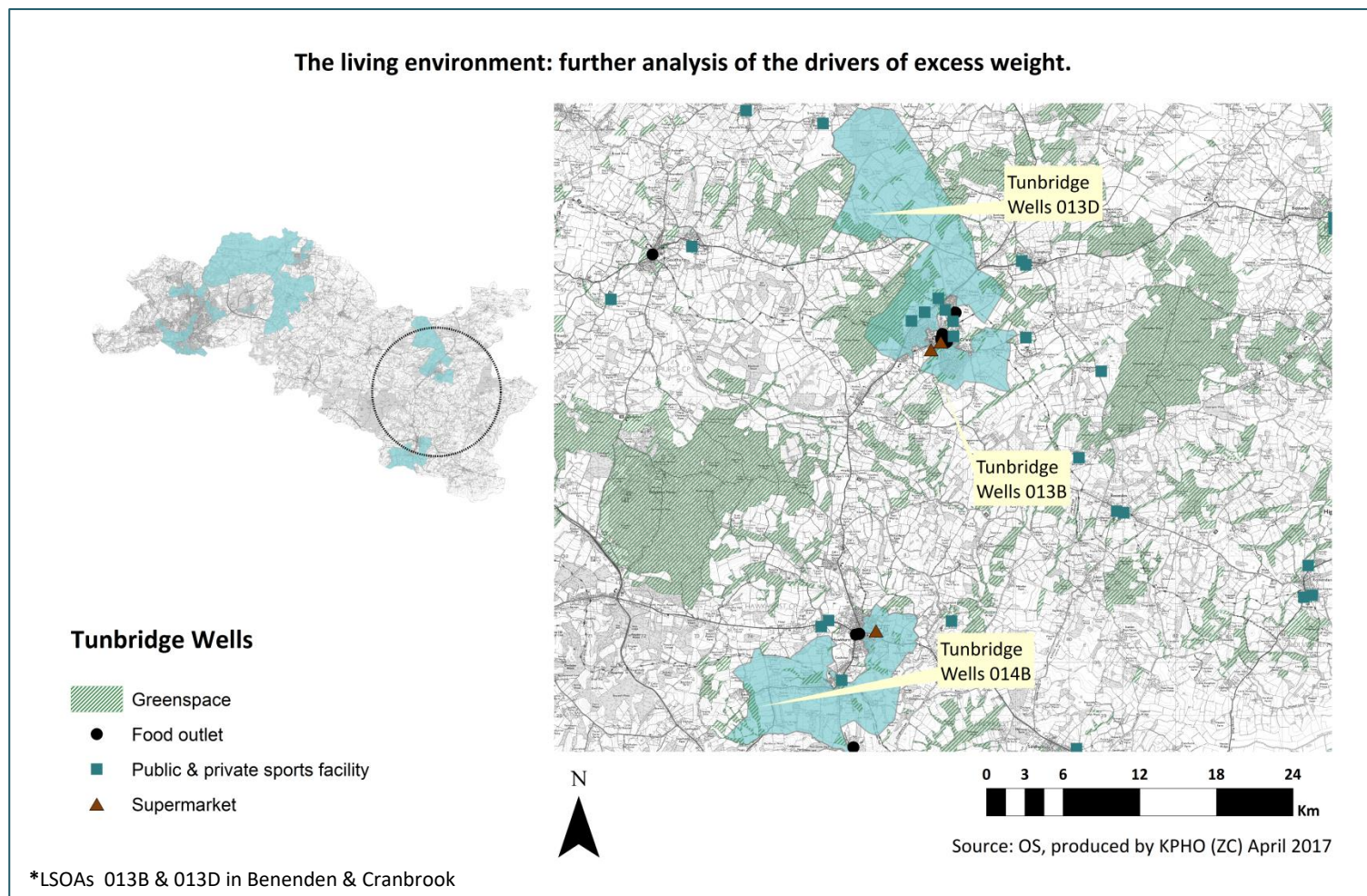
ETHNICITY:

Weak association between black ethnicity and excess weight.

THE LIVING ENVIRONMENT:

- Rural and urban classification is Town & Fringe.
- Lower access to supermarkets in parts of Benenden & Cranbrook.
- Lower access to greenspace in Hawkhurst & Sandhurst.
- Distance to nearest food outlet within 1200m.

The living environment: further analysis of the drivers of excess weight.



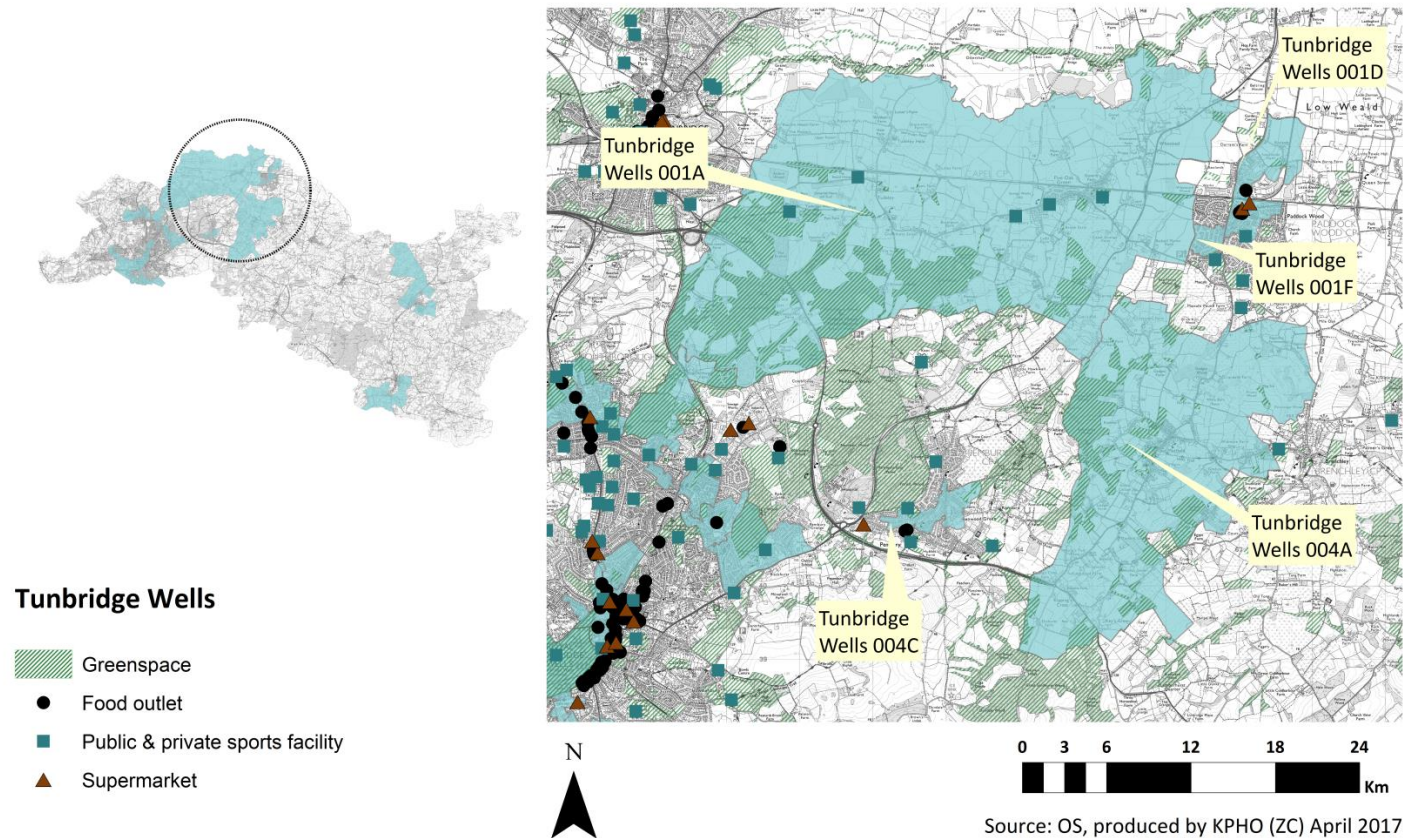
WARDS:

- Brenchley & Horsmonden,
- Capel,
- Paddock Wood East,
- Paddock Wood West,
- Pembury,

ETHNICITY:

Some association between black ethnicity and excess weight. **But not an area with a high concentration of black individuals in the population.**

The living environment: further analysis of the drivers of excess weight.



THE LIVING ENVIRONMENT:

- Rural and urban classification is Town & Fringe, except for Capel (001A) and Brenchley & Horsmonden (004A) classed as Village.
- Evidence for low access to supermarkets in Capel.
- Less than 50% of LSOA populations have access to greenspace.
- Distance to nearest food outlet greater than 1200m within Capel and Brenchley & Horsmonden.

WARDS:

- Broadwater,
- Culverden,
- Pantiles & St Marks,
- Rusthall,
- Sherwood,
- Southborough & High Brooms,
- Southborough North,

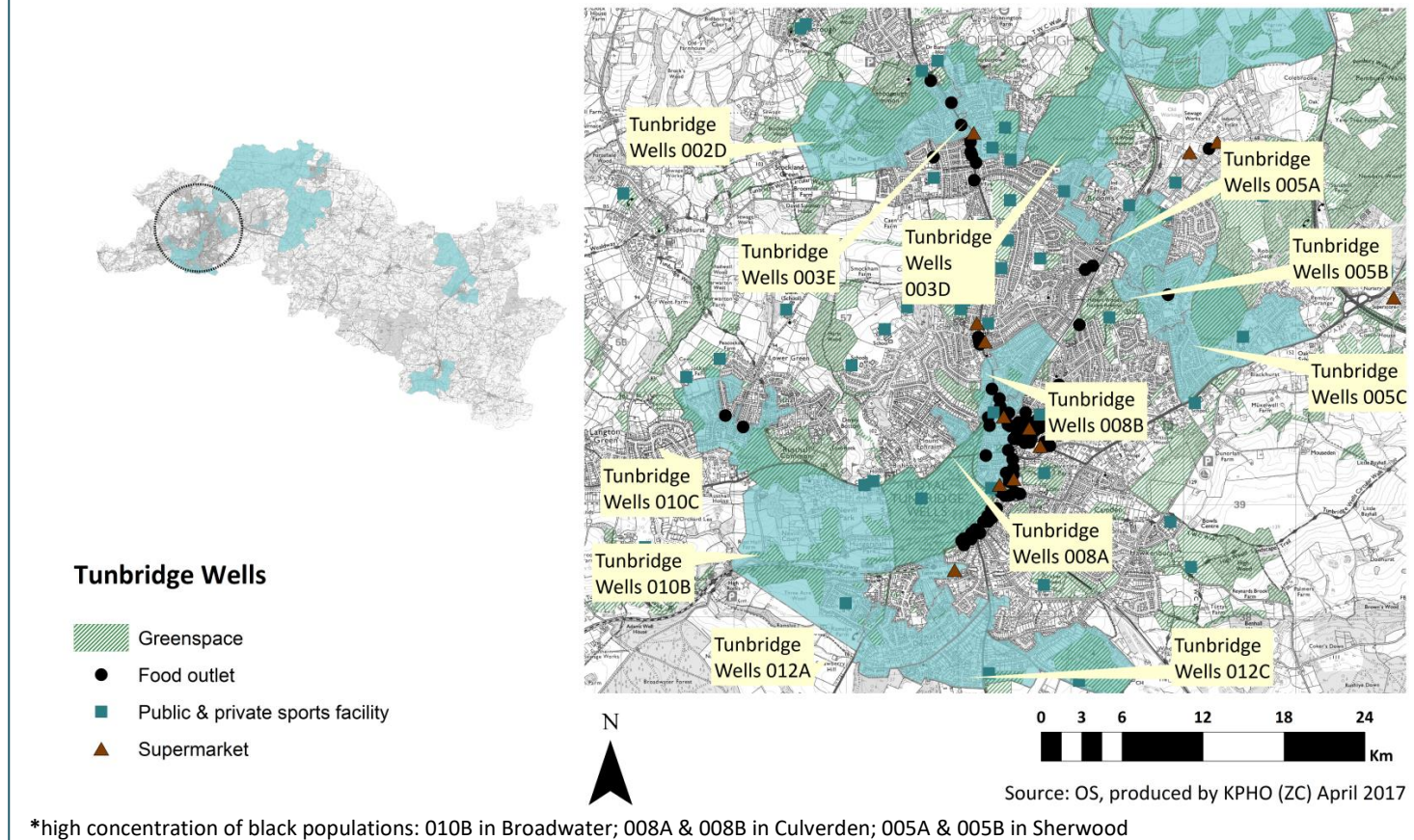
ETHNICITY:

Some association between black ethnicity and excess weight. **Some areas* have high concentration of black individuals in the population.**

THE LIVING ENVIRONMENT:

- Rural and urban classification is Urban.
- Evidence for low access to supermarkets in Sherwood and Rusthall (010C)
- Low access to greenspace within Broadwater (012A), Southborough & High Brooms (003D) and Pantiles & St Marks (012C).
- Distance to nearest food outlets within 1200m.

The living environment: further analysis of the drivers of excess weight.



| Appendix A: Indicators Used

Lower super output areas with **high levels of excess weight** defined as:

- upper quartile of overweight or obesity as measured by the National Child Measurement Programme 2008-2014

Geographically weighted regression performed using the following variables:

- percentage overweight or obese as measured by the National Child Measurement Programme 2008-2014
- percentage of total population from a Black ethnic group, all ages, as measured by the 2011 Census

Areas with **high Black ethnic group concentration** have been defined as:

- upper quintile of local authority Black population resident within lower super output area as measured by the 2011 Census

The **living environment variables** used:

- mapping the locations of greenspace, food outlets, public & private sports facilities and supermarkets
- straight line distance from LSOA population weighted centroid to nearest takeaway, with emphasis on takeaways within 1200m
- bottom 25th percentile of index scores for supermarket access, combined using arithmetic mean of:
 - straight line distance from LSOA population weighted centroid to supermarket
 - the percentage of LSOA households with no car access for families with dependent children or lone parents was extracted from the 2011 Census
- LSOAs with less than 50% population access to greenspace
 - 1 site greater than 2ha (using ANGSt naturalness 1,2 & 3) within 300m of where people live
- straight line distance from LSOA population weighted centroid to nearest public & private sports facility, with emphasis on the bottom 10th percentile of distances (roughly equivalent to distances greater than 1km)