

# THANET

# **National Child Measurement Programme:**

# **Further Analysis of the Drivers of Excess Weight**

# February 2017



### **Produced by**

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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 <u>full report</u> has been published.

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

- Local authority level <u>trend analysis of data up to 2015/16</u>, with comparisons to Kent, the South East and England.
- Kent <u>analysis of the inequalities</u> 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 <u>full report</u>. Maps have also been presented for the LSOAs in Thanet with the highest levels of excess weight<sup>1</sup> across Kent.

<sup>&</sup>lt;sup>1</sup> 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 Other<sup>2</sup> 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 <u>full report</u> details the statistical methods used.

This identifies areas where:

- the association between black ethnicity and excess weight is strong
- <u>and</u> 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.

<sup>&</sup>lt;sup>2</sup> 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.

Ward Code	Ward Name	LSOA Code	LSOA Name	IMD Kent weighted quintile	Mind the Gap Type	Upper quartile excess weight
E05005081	Beacon Road	E01024634 E01024635	Thanet 006B Thanet 009A	1 4		year six reception
E05005083	<b>Birchington South</b>	E01024641	Thanet 007A	1		year six
E05005084	Bradstowe	E01024644	Thanet 009C	5		reception
E05005085	Central Harbour	E01024645	Thanet 015A	2		reception/ year six
E05005086	Cliffsend & Pegwell	E01024651	Thanet 017B	2		year six
E05005087	Cliftonville East	E01024654 E01024655	Thanet 002B Thanet 002C	2 3		reception/ year six reception
E05005088	Cliftonville West	E01024657	Thanet 001A	1	1	year six
		E01024658	Thanet 001B	1	1	reception/ year six
		E01024660	Thanet 001D	1	1	year six
		E01024661	Thanet 004A	1	1	reception
E05005089	Dane Valley	E01024663	Thanet 006D	1	3	reception
		E01024664 E01024665	Thanet 004B Thanet 004C	1	3	reception year six
E05005090	Eastcliff	E01024670	Thanet 015D	1	1	reception
		E01024671	Thanet 016E	1	4	reception/ year six
E05005091	Garlinge	E01024672 E01024673	Thanet 005A Thanet 005B	1 2	3	year six reception
E05005093	Margate Central	E01024676 E01024677	Thanet 003A Thanet 003B	1	1	reception/ year six year six
E05005094	Nethercourt	E01024679 E01024680	Thanet 017D Thanet 017E	3 4		reception/ year six year six
E05005095	Newington	E01024682	Thanet 013A	1	3	reception
	č	E01024683 E01024684	Thanet 013B Thanet 013C	1	3	year six reception

## 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
E05005096	Northwood	E01024686	Thanet 011A	1		year six
		E01024687	Thanet 013E	1	3	year six
		E01024688	Thanet 011B	2		year six
E05005097	St Peters	E01024691	Thanet 011E	3		reception
E05005098	Salmestone	E01024697	Thanet 003D	1	3	reception/ year six
E05005099	Sir Moses	E01024698	Thanet 012B	2		reception
	Montefiore	E01024699	Thanet 012C	1	3	reception
E05005100	Thanet Villages	E01024701	Thanet 014A	2		year six
		E01024702	Thanet 014B	2		year six
E05005102	Westbrook	E01024710	Thanet 003E	1	4	year six
		E01024711	Thanet 005D	2		year six
E05005103	Westgate-on-Sea	E01024714	Thanet 007C	1		year six
		E01024715	Thanet 007D	1		year six
		E01024716	Thanet 007E	2		year six

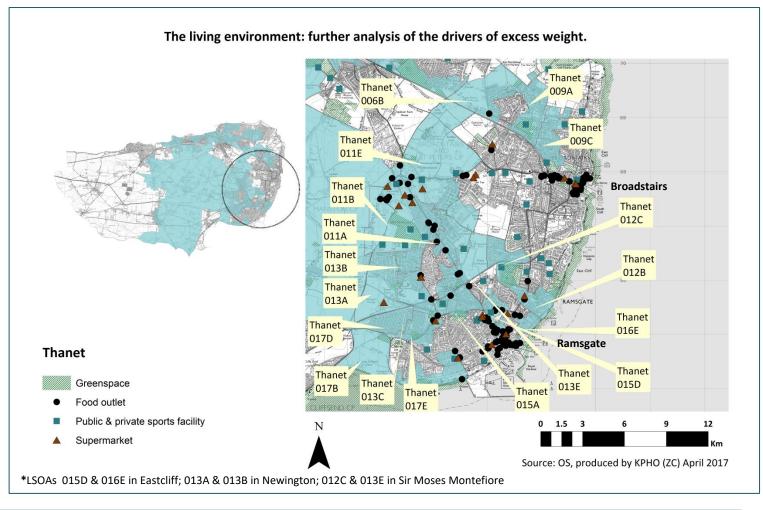
#### WARDS:

- Beacon Road,
- Bradstowe,
- Central Harbour,
- Cliffsend & Pegwell,
- Eastcliff\*,
- Nethercourt,
- Newington\*,
- Northwood\*,
- Sir Moses Montefiore,
- St. Peters,

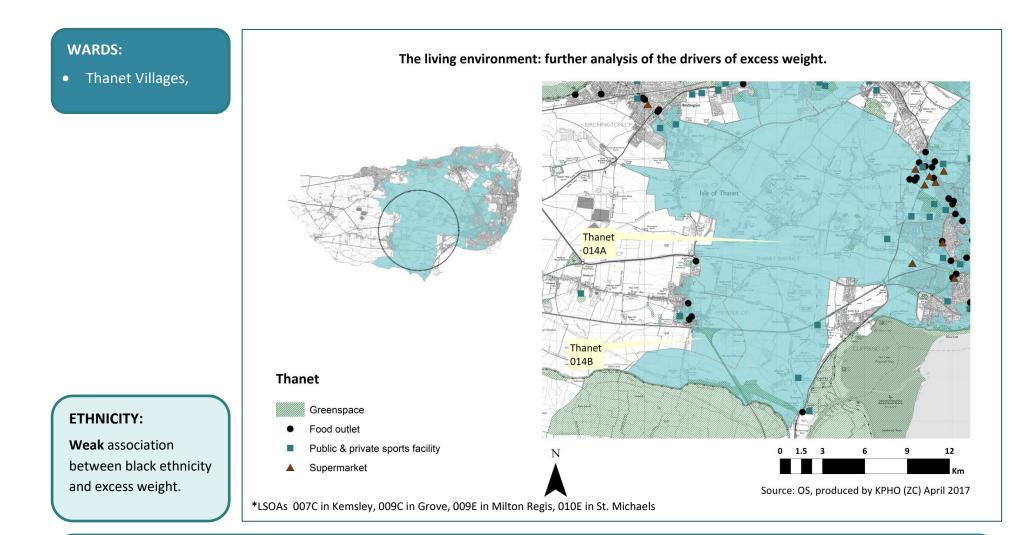
# \*parts in most deprived decile

## ETHNICITY:

Weak association between black ethnicity and excess weight.



- Rural and urban classification is Urban.
- Some evidence for lower access to supermarkets within areas in most deprived decile, driven by low car ownership.
- Very low access to greenspace within Beacon Road, Eastcliff, Newington, Northwood & St Peters.
- Distance to nearest food outlet within 1200m.



- Rural and urban classification is Village and Town & Fringe.
- Evidence for low access to supermarkets (014B), driven by greater distance to nearest supermarket.
- Less than 50% of LSOA populations have access to greenspace.
- Distance to nearest food outlet greater than 1200m (014A).

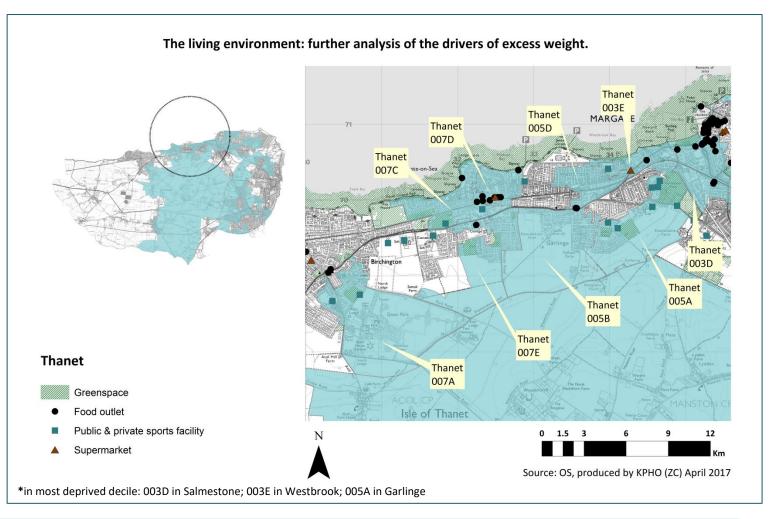
#### WARDS:

- Birchington South,
- Garlinge\*,
- Salmestone\*,
- Westbrook\*,
- Westgate on Sea,

\*parts in most deprived decile

#### **ETHNICITY:**

Some association between black ethnicity and excess weight. Not an area with high concentration of black individuals in the population.



- Rural and urban classification is Urban.
- Low access to supermarkets within areas in most deprived decile, as well as, Birchington South (007A).
- Less than 50% of the population with access to greenspace.
- Distance to nearest food outlet greater than 1200m.

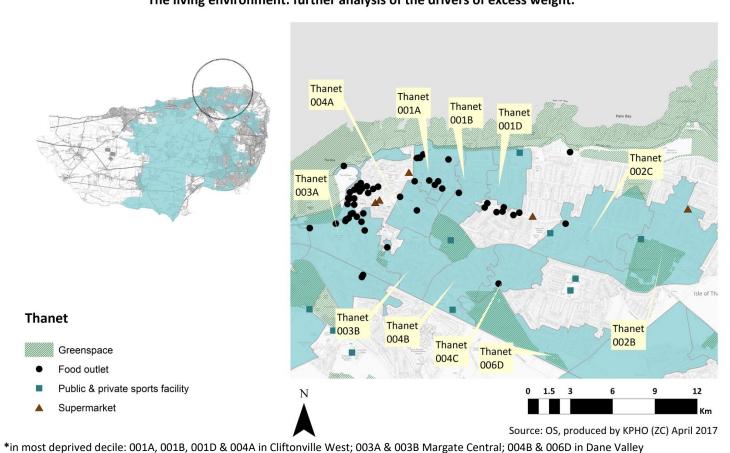
#### WARDS:

- Cliftonville East,
- Cliftonville West\*,
- Dane Valley\*,
- Margate Central\*,

\*parts in most deprived decile

## **ETHNICITY:**

Some association between black ethnicity and excess weight. Cliftonville West & Margate **Central** have a high concentration of black individuals in the population.



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

- Rural and urban classification is Urban. •
- Low access to supermarkets in most deprived areas, driven by low car ownership. •
- Less than 50% of the population with access to greenspace in Cliftonville West (except 001A), East (except 002B) & Margate Central. ٠
- Distance to nearest food outlet within 1200m, except parts of Cliftonville East (002B). •

# 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 25<sup>th</sup> 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 10<sup>th</sup> percentile of distances (roughly equivalent to distances greater than 1km)