

Northumberland Local Plan

Public Health Technical Background Paper on Planning for Hot Food Takeaways

July 2018

1. Purpose of this paper

1.1. This background paper has been prepared by Northumberland County Council public health team, in order to provide the background public health evidence and data that underpin the planning policy relating to applications for new Use Class A5 hot food takeaways in the Draft Northumberland Local Plan July 2018.

2. Background

- 2.1. Local authorities are increasingly developing planning policies to restrict the proliferation of hot food takeaways with the aim of protecting the health and wellbeing of people of all ages, including the prevention of obesity and unhealthy diets with their associated health risks as well as the prevention of disturbance from noise, odour and possible anti-social behaviour that may be increased when A5 uses are clustered together.
- 2.2. The development of these planning policies helps to address two key priorities of the draft Northumberland Joint Health and Wellbeing Strategy:
 - To support children and young people to make positive lifestyle and social choices, and
 - To refocus and prioritise prevention and health promotion.

3. Introduction

- 3.1. When combined, being overweight or obese or having an unhealthy diet is the biggest risk factor for death and disability in North East England, accounting for 18% of disability-adjusted life years lost.¹ ²
- 3.2. Overweight and obesity contribute to an increased risk of high blood pressure, type 2 diabetes mellitus, cardiovascular diseases and some cancers. Obesity is also associated with decreased self-esteem and mental wellbeing. The costs of obesity to the NHS are thought to be £6 billion per year, whilst the overall cost of obesity to wider society is estimated at £27 billion per year.³
- 3.3. For adults, overweight and obesity ranges are determined by using weight and height to calculate the 'body mass index' (BMI). An adult who has a BMI between 25 and 29.9 is considered overweight; BMI over 30 is considered as obese. This classification is slightly different for Asian population. The obesity and overweight classification for children is based on their age and sex. Almost all schoolchildren in Reception (4-5 years) and Year 6 (10-11 years)

- have their height and weight measured annually as part of the National Child Measurement Programme (NCMP).
- 3.4. The prevalence of obesity in England has more than doubled in the last twenty five years and, without system-wide changes, is expected to double again in the next 40 years.⁴
- 3.5. In common with the rest of England, 6 in 10 adults in Northumberland were overweight or obese in 2015/16.⁵
- 3.6. In Northumberland schools in 2016/17, 10.5% of children in Reception (4-5 years of age) were obese (9.6% in England) and 24.3% were overweight or obese (22.6% in England).⁵ As obesity tends to track into adulthood, obese children are more likely to become obese adults.⁶
- 3.7. This picture worsens between Reception and Year 6. In Northumberland schools in 2016/17, 21.1% of children in year 6 (10-11 years of age) were obese (20.0% in England) and 35.6% were overweight or obese (34.2% in England). However, this varies considerably between electoral divisions (wards) in Northumberland, from 15.8% in Wooler to 52.7% in Hirst (see Figure 8, Figure 9 and Table 1 in the Appendix).
- 3.8. There are also marked socioeconomic inequalities in obesity rates: the prevalence of childhood obesity in the 10% most deprived local areas in England is approximately double that in the 10% least deprived. This difference is even more marked in Northumberland (see Figures 6 to 9 at the end of this document).
- 3.9. Obesity is a complex problem that requires action from individuals and society across multiple sectors. One important action is to modify the environment so that it does not promote sedentary behaviour or provide easy access to energy-dense food. The aim is to help make the healthy choice the easy choice via environmental change and action at population and individual levels.⁶
- 3.10. Public Health England (PHE) reports that over recent years there has been an increase in the proportion of food eaten outside the home, which is more likely to be high in calories. PHE notes that hot food takeaways, in particular, tend to sell food that is high in fat and salt, and low in fibre, fruit and vegetables.⁶ Gateshead's Independent Takeaway Study Analysis of Nutrient Data (2013) found that a large proportion of takeaway food contained more calories, fat and saturated fat in one portion than 66% of the recommended daily intake for a female, and in many cases nearly 100% of the recommended daily intake.⁷

- 3.11. Establishments whose primary business is for the sale of hot food for consumption off the premises fall within the Use Class A5 as defined by the Town and Country Planning (Use Class) Order 1987 (as amended).
- 3.12. Nationally, the number of fast-food restaurants within a five-minute walk of a primary or secondary school rose from 9,700 in 2009 to 15,327 in 2016 a rise of 58%.
- 3.13. In England, there is a strong association between deprivation and the density of fast food outlets (Use Class A5), with more deprived areas having a higher proportion of fast food outlets per head of population than less deprived areas.³
- 3.14. Many local authorities have either included specific policies in their Local Plan to restrict the development of new fast food premises (for example, Hartlepool), or drawn up Supplementary Planning Documents (SPDs) that relate to a policy in the local plan (for example, Gateshead, Newcastle upon Tyne and many London Councils).
- 3.15. Following a motion moved by Councillor Bawn at a Full Council meeting on 22 February 2017, prior to the withdrawal of the Northumberland County Council Core Strategy following the election of the Conservative administration, it was resolved that:
 - (a) the Council recognises the importance of a balanced and healthy diet to safeguard the health of local residents especially children;
 - (b) in light of the Council's statutory role in the promotion of good health it will take all appropriate steps to safeguard health and promote a healthy diet; and
 - (c) the Council resolves to review the planning priorities of the Council in relation to fast food outlets after adoption of the Core Strategy.

4. National health and planning policy context

- 4.1. The government's public health strategy *Healthy lives, healthy people*, explicitly recognises that "health considerations are an important part of planning policy". ⁹
- 4.2. The National Planning Policy Framework (NPPF) makes it clear that local planning authorities (LPAs) have a responsibility to promote healthy communities and that local plans should "take account of and support local strategies to improve health, social and cultural wellbeing for all". ¹⁰ The framework also states that LPAs should prepare planning policies and take

decisions to achieve places that promote "strong neighbourhood centres and active street frontages which bring together those who work, live and play in the vicinity".

- 4.3. The Planning Practice Guidance (PPG), published by the Government in 2014, also emphasises that health and wellbeing should be considered by local authorities in plan making and decision taking including promoting access to healthier food. Paragraph 002 of the PPG states that "the built and natural environments are major determinants of health and wellbeing".¹¹
- 4.4. Public Health England recommends that planning teams should ensure that "development avoids over-concentration of hot food takeaways in existing town centres or high streets, and restricts their proximity to schools or other facilities for children and young people and families".³
- 4.5. The National Institute for Health and Care Excellence, in its guidance on Cardiovascular disease prevention, recommends that local authorities should "restrict planning permission for take-aways and other food retail outlets in specific areas (for example, within walking distance of schools)." ¹²

5. Local health policy context

- 5.1. Healthy diet and maintaining healthy weight are key priorities of the current Joint Health and Wellbeing Strategy (JHWS) for Northumberland, *Achieving Health and Wellbeing in Northumberland* (April 2014). ¹³ The focus is on early intervention to "prevent overweight and obesity; prevent people who are overweight from becoming obese; and prevent the chronic ill health effects associated with obesity." The forthcoming refresh of the Northumberland JHWS will focus on "whole system approaches to health and care" which bring together partners from across the system in Northumberland to collectively identify opportunities for action across sectors, settings and the life course. One such opportunity is to shape the environment in which children and adults live, develop and work so that people are 'nudged' to make healthier food choices.
- 5.2. The new Northumberland County Council Corporate Plan 2017 to 2021 recognises the importance of helping people to feel well, preventing the conditions that cause ill health, and maintaining the vibrancy of our town centres.

6. National evidence

6.1. There is evidence that increased consumption of takeaway food is associated with higher energy and fat intake, increased body fat, and lower intakes of

- fruit and vegetables in both adults and children, as well as increased type 2 diabetes and coronary heart disease in adults.¹⁴
- 6.2. Several studies have found a significant association between the number or density of fast food outlets in home environment and deprivation, after adjusting for other factors that may explain the association. ⁶ ¹⁵ ¹⁶ ¹⁷ Fraser et al (2011) found that deprivation is the biggest contributing factor to the association between increased frequency of eating at fast food restaurants and higher consumption of unhealthy foods. ¹⁸
- 6.3. Evidence on the association between hot food takeaways and obesity is developing. Although there have been inconsistent findings between (mainly US) studies investigating an association between exposure to fast food outlets and body weight in adults, a recent UK study found associations between takeaway food outlet exposure and obesity in home, work and commuting route environments.¹⁹
- 6.4. Several UK studies have found a significant association between the number or density of fast food outlets near the home and the proportion of school children who are overweight or obese in that local area, after adjustment.¹⁵

 16 20 Two studies used NCMP data (for 4-5 and 10-11 year-olds), whilst a third used BMI data from various different age groups. A fourth UK study found no such association.¹⁷
- 6.5. Evidence on the association between hot foods takeaways near to schools and obesity among school children is inconsistent. A systematic review of 30 studies (only two from the UK) found some evidence of an association between retail food environment surrounding schools and body weight, but not with food consumption or purchases.²¹ Two subsequent UK studies in Berkshire and Leeds found no association between the densities of fast food outlets in school environments and student BMI among primary school children.¹⁷ ²⁰
- 6.6. There is some evidence from studies in London and Glasgow that many outlets near to schools have marketing strategies targeted at school pupils. 22 23

7. Local evidence

7.1. Local data appear to mirror the national findings, although adjustment for other factors that may explain the associations (confounders) was not undertaken. Figures 1 to 5 (at the end of this document) show the following moderate to strong associations:

- Between electoral division Index of Multiple Deprivation score and the rate of overweight or obesity in children in Year 6 (r = 0.615; Figure 1).
- Between electoral division Index of Multiple Deprivation score and the rate of overweight or obesity in children in Reception (r = 0.427; Figure 2).
- Between the number of fast food outlets per electoral division and electoral division Index of Multiple Deprivation score (r = 0.560; Figure 3).
- Between the number of fast food outlets per electoral division and the rate of overweight or obesity in children in Year 6 (r = 0.44; Figure 4).
- Between the number of fast food outlets per electoral division and the rate of overweight or obesity in children in Reception (r = 0.243; Figure 5).

Figures 6 to 9 contain maps demonstrating the apparent association between deprivation and childhood overweight and obesity. Table 1 contains data for each electoral division and Table 2 for the Main Towns.

It should also be noted that the data on which the number of A5 hot food takeaways are based may underestimate the true number. Based on data from the Local Land and Property Gazetteer, the concentration of A5 hot food takeaways in Northumberland is 0.69 per 1000 population. Based on the Food environment assessment tool (Feat), the number of hot food takeaways in Northumberland in September 2017 was 1.09 per 1000 population. Feat uses Ordnance Survey Point of Use data which are not currently available to the Council. Electoral division-level data using this source is illustrated in Figure 10.

7.2. The number of hot food takeaways in Northumberland appears to be increasing. Based on Ordnance Survey data used in the Feat, there were 0.93 takeaways per 1000 population Northumberland in June 2014; in September 2017, there were 1.09 per 1000 population; this is an increase of 17%.

8. Conclusion

8.1. Overweight, obesity and unhealthy diet are a major cause of death, disability and financial cost to both Northumberland and England, and these harms are expected to increase without urgent system-wide action that includes modification to the environment so that it does not provide easy access to energy-dense food. Planning and health policy now recognise the importance of considering health in planning decisions, including appropriate policy to restrict development of hot food takeaways. Many areas have developed policies. Both nationally and locally, there is both a higher prevalence of childhood obesity and a higher concentration of hot food takeaways in more deprived areas. Given emerging evidence suggesting an association between hot food takeaways and obesity, there is a compelling case to

restrict the development of hot food takeaways in areas with high concentration, high prevalence of overweight and obesity, or near to schools.

9. Policy

9.1. Hot food takeaways

New Use Class A5 hot food takeaways will be permitted where all of the following apply:

- (a) They are not within a Main Town¹ or, otherwise, within an electoral division where either:
 - i More than 35.3per cent of the Year 6 pupils are classified as overweight or obese [footnote: This is the proportion of children who were overweight or obese in Northumberland in 2016/17]; or
 - ii The number of approved A5 hot food takeaway establishments per 1000 resident population equals or exceeds the Northumberland total in March 2018 based on the Local Land and Property Gazetteer, that is 0.69 per 1000 resident population;
- (b) They are over 400 metres' walk from any entrance gate of any existing or proposed school or college with students under the age of 18 years;
- (c) They will not create or add to a cluster of three or more adjacent Use Class A5 hot food takeaways in the same row of shop units;
- (d) They will not be replacing the last convenience shop or public house in a village or the last convenience shop in a parade of shops that serve a residential area;
- (e) They would not create safety hazards for pedestrians or other users of the public highway;
- (f) They will not have an adverse effect on the living conditions of any nearby residents from noise or disturbance or litter or odours or that any such disturbance can be suitably mitigated.

9.2. Use Classes order

Establishments whose primary business is for the sale of hot food for consumption off the premises fall within the Use Class A5 as defined by the Town and Country Planning (Use Class) Order 1987 (as amended). The proposed layouts of such premises provide a clear guide as to whether the use of the premises will fall into the A3 (restaurant) or the A5 (hot food

¹ Alnwick, Amble, Ashington, Bedlington, Berwick, Blyth, Cramlington, Haltwhistle, Hexham, Morpeth, Ponteland and Prudhoe

takeaway) Use Class. In determining the dominant use of the premises consideration will be given to:

- The proportion of space designated for hot food preparation and other servicing in relation to designated customer circulation space; and/or
- The number of tables and chairs to be provided for customer use;
 and/or
- The percentage of the use to the overall turnover of the business.

9.3. Rationale for thresholds based on overweight and obesity or hot foot takeaways concentration

a) i. They are not within a Main Town or, otherwise, within an electoral division where more than 35.3 per cent of the Year 6 pupils are classified as overweight or obese [the proportion in Northumberland in 2016/17].

This threshold was chosen because it is the proportion of pupils in Year 6 (10-11 years of age) in Northumberland who were overweight or obese was in 2016/17, the most recent year that data are available. The proportion has increased from 31.4% in 2008/9. Setting the threshold at the current average for Northumberland will contribute to preventing further increases in childhood overweight and obesity.

The reason for focusing on Main Towns as well as electoral divisions is so as to permit an equal approach within towns with more than one electoral division.

a) ii. They are not within a Main Town or, otherwise, within an electoral division where the number of approved A5 hot food takeaway establishments per 1000 resident population equals or exceeds the Northumberland total Northumberland in March 2018 based on the Local Land and Property Gazetteer, that is 0.69 per 1000 resident population.

The threshold was chosen because it is the current number of hot food takeaways per 1000 resident population in Northumberland, and so will enable the policy to prevent further increases in the rate. Based on data available locally from the Local Land and Property Gazetteer (March 2018), the number of hot food takeaways per 1000 resident population in Northumberland is 0.69 per 1000 resident population. We have no national figure with which to compare that uses the same data source. However, several other data sources that provide comparative data suggest that the number of hot food takeaways per 1000 resident population in Northumberland is similar to that in England and that it has been increasing since 2014.

Using data from PointX, Public Health England found that there were 0.85 takeaways per 1000 people in Northumberland in 2014, compared to 0.88 per 1000 in England.²⁵ Using data on takeaways from Ordnance Survey Point of Use, the Feat map shows that there were 0.93 takeaways per 1000 population Northumberland in June 2014; in September 2017, there were 1.09 per 1000 population; this is an increase of 17%.²⁴

b) They are over 400 metres' walk from any entrance gate of any existing or proposed school or college with students under the age of 18 years.

Public Health England reported that most authorities, in planning policies on hot food takeaways, "have used a distance of 400m to define the boundaries of their fast food exclusion zone, as this is thought to equate to a walking time of approximately five minutes".⁶

Table 1. Electoral division data on deprivation, overweight and obesity (Year 6), number and concentration of takeaways. Sources: ONS, NCMP, Local Land and Property Gazetteer.

Electoral division name	Index of Multiple Deprivation - Deprivation score	Percentage of Year 6 children Overweight or Very Overweight	Number of takeaways	Number of takeaways per 1000 people
Hirst	50.9	52.7%	7	1.29
Lynemouth	27.2	50.0%	4	0.90
Norham and Islandshires	23.5	50.0%	0	0
Bellingham	17.6	50.0%	1	0.25
Cowpen	39.8	49.2%	1	0.23
College	35.6	48.6%	9	1.81
Prudhoe South	18.2	48.6%	13	2.34
Stakeford	12.4	48.1%	4	0.88
Croft	50.8	46.9%	16	3.50
Bedlington Central	14.1	46.9%	5	0.98
Cramlington West	30.8	46.5%	5	0.91
Wensleydale	20.3	46.4%	6	1.34
Sleekburn	34.3	46.0%	8	1.86
Newbiggin Central and East	39.5	44.9%	7	1.52
Druridge Bay	24.4	44.7%	3	0.46
Choppington	32.2	43.9%	3	0.63
Ashington Central	37.6	43.2%	12	2.44
Cramlington East	30.1	42.9%	7	1.66
Seghill with Seaton Delaval	20.6	41.5%	8	1.37
Bedlington East	32.5	40.4%	2	0.42
Cramlington Village	17.9	40.0%	5	1.11
Berwick East	22.0	39.6%	3	0.63
Humshaugh	15.8	39.3%	0	0
Kitty Brewster	26.9	39.0%	5	0.79
Hartley	12.4	38.8%	2	0.40
Ponteland North	9.2	38.0%	3	0.60
Holywell	17.5	37.9%	1	0.19
Newsham	36.0	37.7%	6	1.27
Seaton with Newbiggin West	25.7	37.5%	1	0.21
Pegswood	21.6	37.3%	2	0.40
Hexham Central with Acomb	14.8	37.1%	4	0.87
Haltwhistle	20.1	36.8%	5	1.04
Cramlington South East	15.2	36.4%	2	0.44
Morpeth Stobhill	19.6	36.0%	4	0.83
Bothal	18.5	35.0%	4	0.90
Berwick North	17.0	34.8%	1	0.22
Isabella	38.5	34.3%	4	0.83
Haydon	16.3	34.1%	2	0.45
Plessey	28.0	33.3%	1	0.26

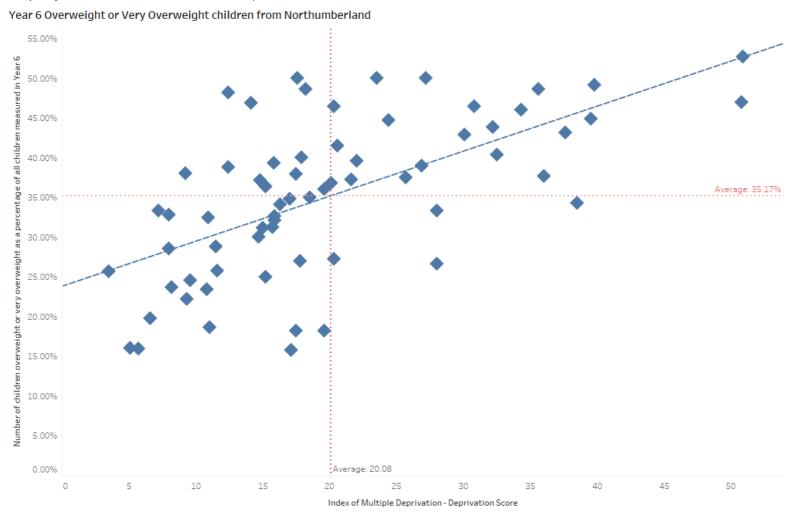
Electoral division name	Index of Multiple Deprivation - Deprivation score	Percentage of Year 6 children Overweight or Very Overweight	Number of takeaways	Number of takeaways per 1000 people
Hexham West	7.2	33.3%	0	0
South Blyth	8.0	32.8%	0	0
Alnwick	15.9	32.7%	7	0.72
Amble West with Warkworth	10.9	32.4%	0	0
Haydon and Hadrian	15.9	32.1%	0	0
Longhorsley	15.7	31.3%	0	0
Bedlington West	15.0	31.1%	4	0.90
Rothbury	14.7	30.0%	1	0.20
Shilbottle	11.5	28.8%	0	0
Corbridge	8.0	28.6%	3	0.71
Bamburgh	20.3	27.3%	4	0.90
Berwick West with Ord	17.8	27.0%	0	0
Amble	28.0	26.7%	2	0.40
Ponteland West	11.6	25.8%	0	0
Cramlington North	3.5	25.7%	2	0.40
Longhoughton	15.2	25.0%	0	0
Prudhoe North	9.6	24.6%	1	0.19
Ponteland East and Stannington	8.2	23.7%	0	0
Morpeth Kirkhill	10.8	23.4%	1	0.20
Bywell	9.3	22.2%	1	0.22
Cramlington Eastfield	6.6	19.8%	0	0
Morpeth North	11.0	18.6%	11	2.39
South Tynedale	17.5	18.2%	0	0
Hexham East	19.6	18.2%	5	1.17
Ponteland South with Heddon	5.1	16.0%	0	0
Stocksfield and Broomhaugh	5.7	15.9%	0	0
Wooler	17.1	15.8%	0	0

Table 2. Main town data on deprivation, overweight and obesity (Year 6), number and concentration of takeaways. Sources: ONS, NCMP, Local Land and Property Gazetteer.

Main town	Electoral divisions making up main town	Percentage of Year 6 children Overweight or Very Overweight	Number of takeaways	Number of takeaways per 1000 people
Alnwick	Alnwick	32.7	7	
	Total/average	32.7	7	0.72
Amble	Amble West with Warkworth	32.4	0	
	Amble	26.7	2	
	Total/average	29.3	2	0.22
Ashington	Ashington Central	43.2	12	
	Bothal	35.0	4	
	Hirst	52.7	7	
	College	48.6	9	
	Haydon	34.1	2	
	Total/average	43.2	34	1.40
Bedlington	Bedlington Central	46.9	5	
	Bedlington East	40.4	2	
	Bedlington West	31.1	4	
	Total/average	38.0	11	0.77
Berwick	Berwick East	39.6	3	
	Berwick West with Ord	27.0	0	
	Berwick North	34.8	1	
	Total/average	65.0	4	0.46
Blyth	Wensleydale	46.4	6	
,	Croft	46.9	16	
	Plessey	33.3	1	
	South Blyth	32.8	0	
	Newsham	37.7	6	
	Kitty Brewster	39.0	5	
	Cowpen	49.2	1	
	Total/average	40.4	35	1.05
Cramlington	Cramlington Village	40.0	5	
	Cramlington East	42.9	7	
	Cramlington South East	36.4	2	
	Cramlington North	25.7	2	
	Cramlington Eastfield	19.8	0	
	Cramlington West	46.5	5	
	Total/average	33.5	21	0.72
Haltwhistle	Haydon and Hadrian	32.1	0	
	Haltwhistle	36.8	5	
	Total/average	34.8	5	0.55

Main town	Electoral divisions making up main town	Percentage of Year 6 children Overweight or Very Overweight	Number of takeaways	Number of takeaways per 1000 people
Hexham	Hexham Central with Acomb	37.1	4	
	Hexham West	33.3	0	
	Hexham East	18.2	5	
	Total/average	29.9	9	0.70
Morpeth	Morpeth Stobhill	36.0	4	
	Morpeth Kirkhill	23.4	1	
	Morpeth North	18.6	11	
	Total/average	26.4	16	1.11
Ponteland	Ponteland South with Heddon	16.0	0	
	Ponteland East and Stannington	23.7	0	
	Total/average	20.6	0	0
Prudhoe	Prudhoe North	24.6	1	
	Prudhoe South	48.6	13	
	Total/average	38.0	14	1.29

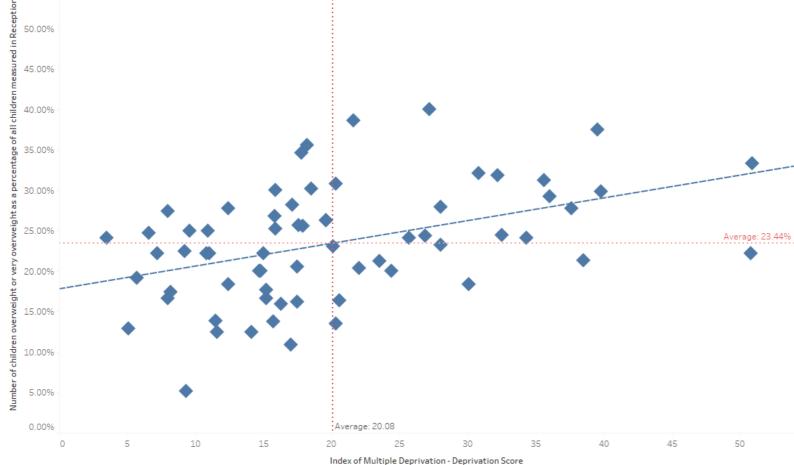
Figure 1. Scatterplot illustrating correlation between Index of Multiple Deprivation score (x axis) and Rate per 1,000 population of overweight or obesity in Year 6 children (y axis) by Electoral Division in Northumberland. (Sources: National Child Measurement Programme; Local Land and Property Gazetteer - Northumberland.)



R-Squared: 0.378381, P-Value: <0.0001

Figure 2. Scatterplot illustrating correlation between Index of Multiple Deprivation score (x axis) and Rate per 1,000 population of overweight or obesity in Reception children (y axis) by Electoral Division in Northumberland. (Sources: National Child Measurement Programme; Local Land and Property Gazetteer - Northumberland.)

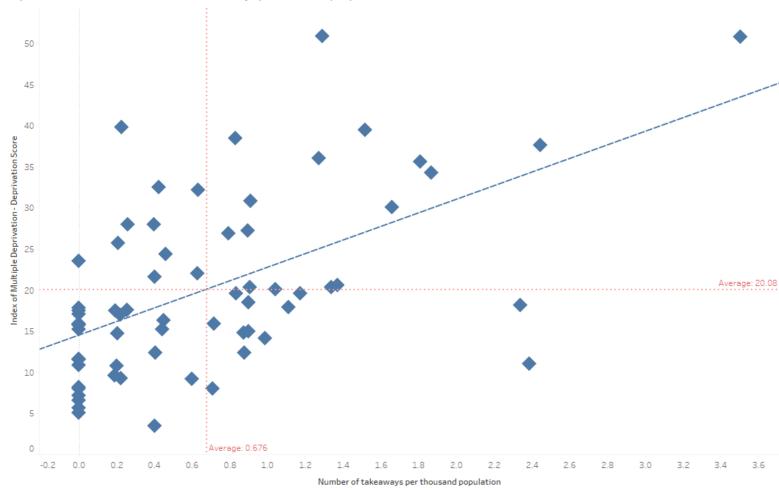




R-Squared: 0.182599, P-Value: 0.0003456

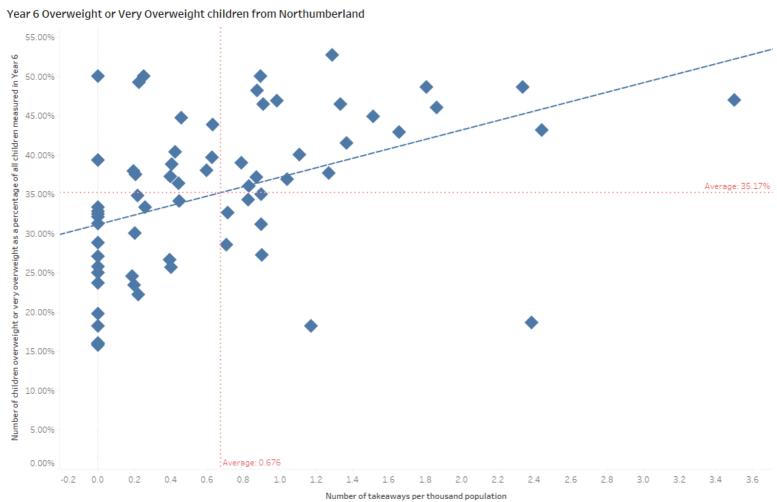
Figure 3. Scatterplot illustrating correlation between Number of Hot Food Takeaways per Electoral Division (x axis) and Index of Multiple Deprivation score (y axis) by Electoral Division in Northumberland. (Sources: Local Land and Property Gazetteer - Northumberland.)

Deprivation levels and the number of takeaways per thousand people, Northumberland



R-Squared: 0.313434, P-Value: <0.0001

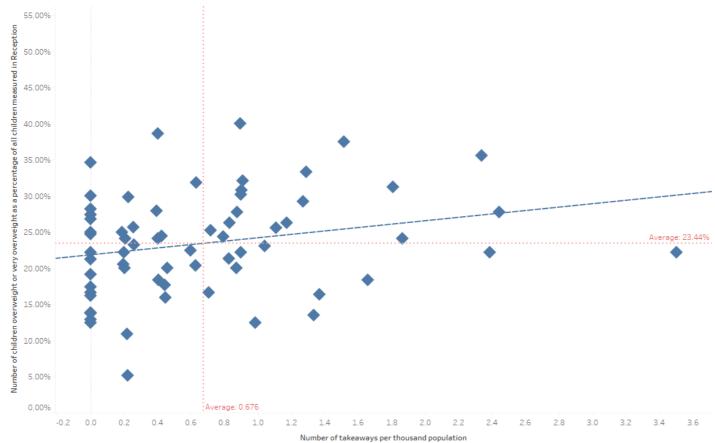
Figure 4. Scatterplot illustrating correlation between Number of Hot Food Takeaways per Electoral Division (x axis) and Rate per 1,000 population of Overweight or Obesity in Year 6 children (y axis) by Electoral Division in Northumberland. (Sources: National Child Measurement Programme; Local Land and Property Gazetteer - Northumberland.)



R-Squared: 0.195578, P-Value: 0.000201

Figure 5. Scatterplot illustrating correlation between Number of Hot Food Takeaways per Electoral Division (x axis) and Rate per 1,000 population of Overweight or Obesity in Reception children (y axis) by Electoral Division in Northumberland. (Sources: National Child Measurement Programme; Local Land and Property Gazetteer.)





R-Squared: 0.0588473, P-Value: 0.0497003

Figure 6. Comparison of percentage of Reception children who are overweight or obese and index of multiple deprivation (IMD) by electoral division (Northumberland)

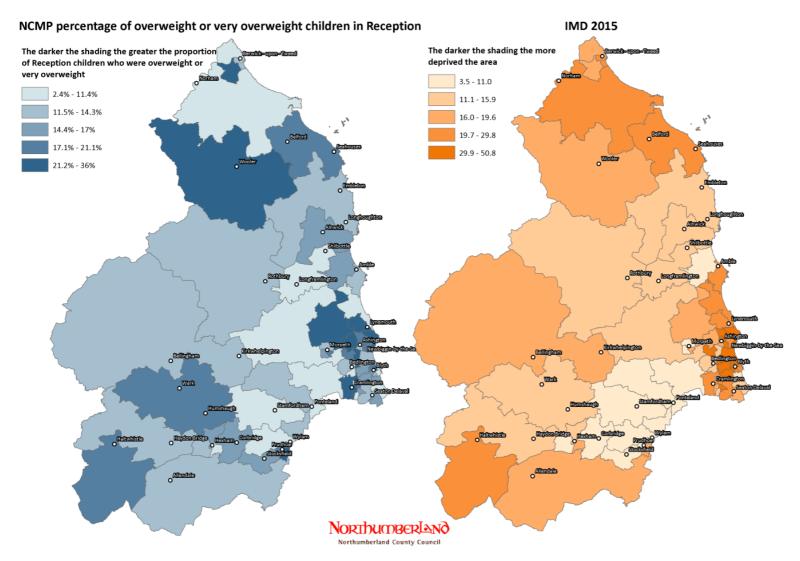


Figure 7. Comparison of percentage of Reception children who are overweight or obese and index of multiple deprivation (IMD) by electoral division (south east Northumberland)

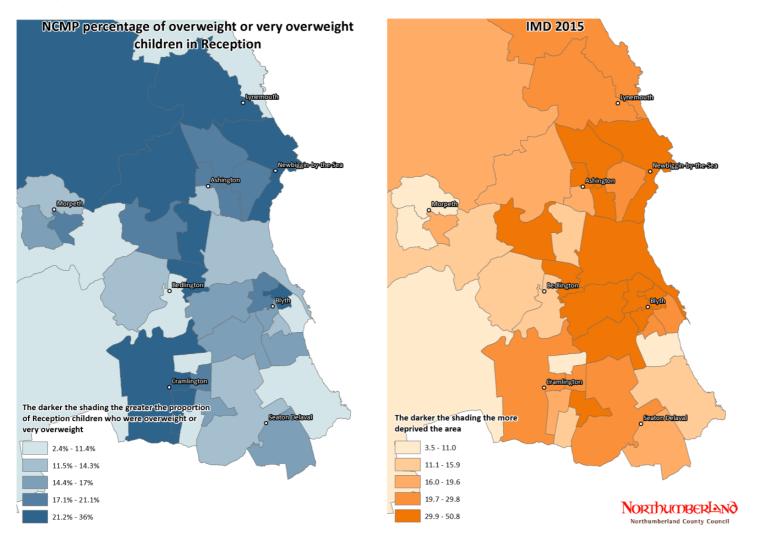


Figure 8. Comparison of percentage of Year 6 children who are overweight or obese and index of multiple deprivation (IMD) by electoral division (Northumberland)

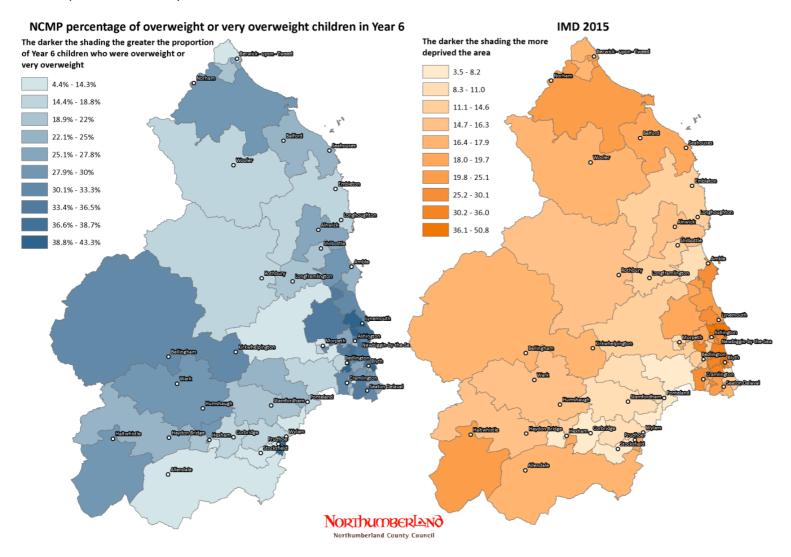


Figure 9. Comparison of percentage of Year 6 children who are overweight or obese and index of multiple deprivation (IMD) by electoral division (south east Northumberland)

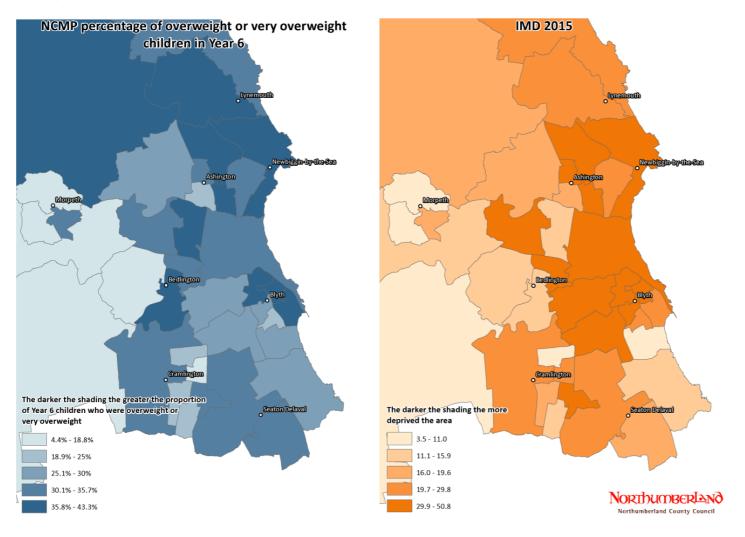
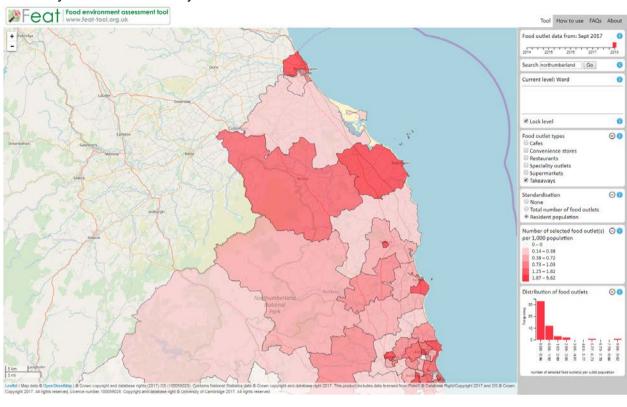
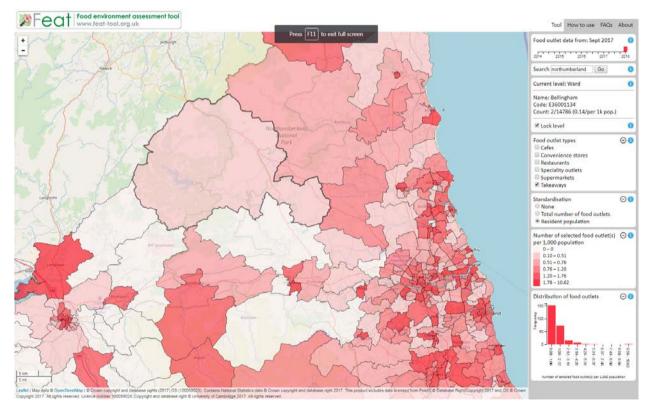


Figure 10. Food environment assessment tool (Feat) maps illustrating number of takeaways per 1000 resident population by electoral division in Northumberland. Data source for takeaways: Ordnance Survey Points of Interest dataset.²⁴





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