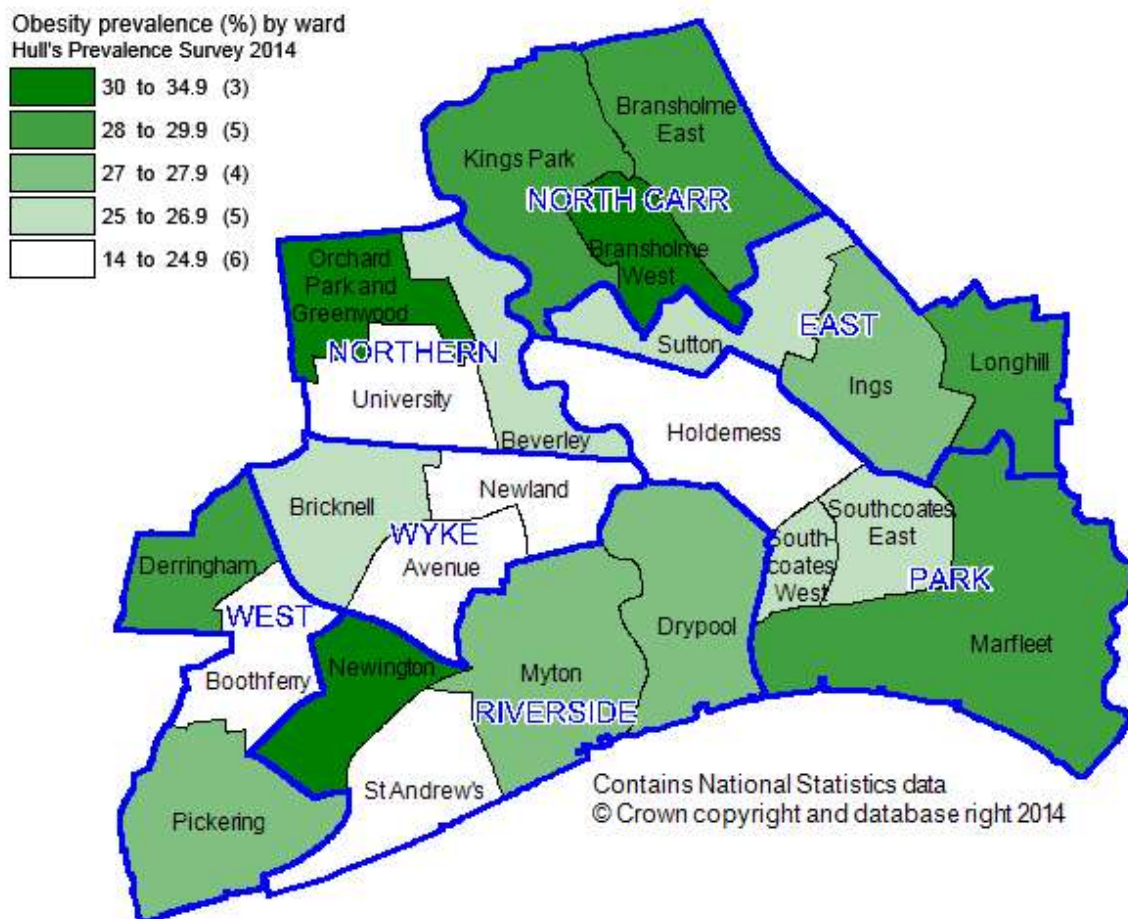


Hull's Adult Prevalence Survey 2014

Physical Activity, Diet and Obesity Update



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July 2015

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1 WHY ARE THESE IMPORTANT?

- Allender et al [1] have estimated the percentage of deaths related to physical inactivity. The figures are 17.1% for ischaemic heart disease, 10.6% for cerebrovascular disease, 2.3% for breast cancer, 3.5% for colon/rectum cancer and 2.3% for diabetes mellitus. Overall, this equates to around 230 deaths in Hull over a three year period due to physical inactivity, i.e. around 75 per year. Attributable fractions for obesity were estimated in 1998, but the National Obesity Observatory acknowledge that analysis will now be out of date, and estimates of attributable fractions due to obesity differ greatly depending on the assumptions made. In 1998, it was estimated that around 6% of all deaths were due to obesity, and where deaths did occur due to obesity they were frequently before retirement age, so were premature deaths. As there are around 2,400 deaths to Hull residents annually, this equates to an estimate of around 150 deaths caused by obesity each year. Deaths due to poor diet are not available. The estimated number of deaths from physical inactivity and/or obesity will likely be fewer than 225 deaths per year as the two risk factors are associated.
- In 2006-07, the cost to the NHS in the UK was estimated to be £5.8 billion for poor diet-related ill health, £0.9 billion for physical inactivity, and £5.1 billion for overweight and obesity [2].
- Excess weight among children aged 4-5 and 10-11 years, and physical activity and inactivity among adults are both performance indicators included in Hull's Health and Wellbeing Strategy 2014-2020.
- Use of green spaces for exercise and health, excess weight among children aged 4-5 and 10-11 years, diet, and excess weight in adults are all indicators within the Public Health Outcomes Framework.

2 KEY POINTS

- ❖ Over five thousand adults in Hull, representative of the population, were asked about behaviours, including diet, physical activity and their height and weight, between September and December 2014.
- ❖ **Diet:** Overall, 23.9% stated they did not have a healthy diet and a further 7.2% stated they “don’t know what a healthy diet is” or “don’t know if I have a healthy diet” with the remaining 68.9% stating they did have a healthy diet. One in five (19.2%) of survey responders ate five or more portions of fruit and vegetables each day (5-A-DAY). A higher percentage of women reported a healthy diet (71.6%) and eating 5-A-DAY (20.5%) compared to men (65.7% and 17.6% respectively). Older survey responders and those living in the least deprived areas were more likely to report eating healthily and eating 5-A-DAY. It is estimated that around 50,000 adults (16+) do not eat a healthy diet in Hull and a further 15,000 do not know what constitutes a healthy diet, and that over 168,000 adults do not eat 5-A-DAY. There is a significant difference in the percentages not eating a healthy diet and not eating 5-A-DAY across the wards. The percentage reporting that they ate a healthy diet increased between the 2004 and 2009 surveys in Hull (from 61.6% to 79.3%), but decreased in the 2011-12 survey (71.8%) and has decreased again in 2014 (68.9%). The percentage reporting that they generally eat 5-A-DAY was 23.0% in Hull’s 2007 survey, which increased to 27.5% in 2009, but has since decreased to 20.2% in 2011-12 and 19.2% in 2014.
- ❖ **Physical activity (2011 guidelines):** Based on the 2011 physical activity guidelines of undertaking physical activity in sessions of 30 minutes or more, 33.5% undertook sessions of moderate or vigorous physical activity five or more times a week, a further 36.3% undertook physical activity at this level but fewer than five times a week, 22.9% did not undertake physical activity at a moderate or vigorous level but at a ‘light’ level only, and 7.2% never undertook physical activity in sessions of 30 minutes or more at a light, moderate or vigorous level. Men were more likely to undertake physical activity to the 2011 national guidelines with 39.5% undertaking 30+ minute sessions of moderate or vigorous physical activity five or more times a week compared to 28.5% of women, and there was a strong association with age. Almost half (48.0%) of those aged 16-24 years fulfilled the 2011 national guidelines but this was one in nine (11.1%) among those aged 75+ years. Less than 3% of those aged under 35 years never undertook physical activity for 30+ minutes at a light, moderate or vigorous level, but one in five (20.5%) of those aged 75+ years did so. Whilst similar percentages fulfilled the 2011 national guidelines across the deprivation fifths, there was an association with physical activity and deprivation for the other four ‘levels’ of physical activity with the most deprived less likely to undertake as much physical activity. There is a significant difference in the percentages fulfilling the 2011 national guidelines across the wards. From the previous surveys, it was estimated that 26.3% of survey responders in 2007 undertook 30 minutes or more of moderate or vigorous physical activity on five or more occasions during the week, increasing to 26.7% in 2011 and 33.5% in 2014.

- ❖ **Physical activity (2012 guidelines):** Based on estimates more comparable to the 2012 physical activity guidelines, 55.6% did not fulfil these guidelines (49.5% of men and 60.9% of women). There was also a strong association with age (85.2% of those aged 75+ years did insufficient physical activity compared to 40.8% of those aged 16-24 years) and deprivation (62.0% and 48.5% for most and least deprived fifths respectively). It is estimated that around 92,434 people fulfil the guidelines (and the remaining 115,999 do not, including 90,743 who are classified as inactive – undertaking fewer than 30 minutes of moderate physical activity per week). Whilst trends over time cannot be examined in Hull, the percentage fulfilling the 2012 physical activity guidelines is lower in Hull (41% in 2014) compared to England (59% in 2008, 60% in 2012 and 56% in 2013).
- ❖ **Obesity:** Almost two-thirds (63.6%) of the survey responders were overweight (37.1%) or obese (26.5%). Prevalence is higher amongst male and older survey responders (but falling slightly in the oldest 75+ year age group). There was no statistically significant difference by deprivation for overweight and obesity combined, but there was for obesity alone with a higher prevalence for the most deprived. However, the difference was not particularly clinically significant with a high prevalence across all areas of Hull regardless of deprivation. It is estimated that 132,496 adults (16+) in Hull are overweight or obese, with 55,246 of them being obese. There is a significant difference in the prevalence across the wards predominantly due to the differences in the age structure across the wards. Whilst the prevalence of overweight alone has decreased in Hull between 2003 and 2014 (by –0.39 percentage points per year), the prevalence of obesity and of overweight and obesity combined have both increased. The prevalence of obesity increased by 0.59 percentage points each year (which is larger than the increase for England which was 0.27 percentage points per year). If the current trend in obesity continues in Hull, then the prevalence is projected to be 31.1% by 2020. The prevalence of overweight and obesity combined increased in Hull by 0.20 percentage points per year, and if the current trend continues, then it is projected that the prevalence in Hull will be 65.6% by 2020.

3 INTRODUCTION

This is an update in relation to the prevalence of physical activity levels, diet, and overweight and obesity in Hull from the Prevalence Survey 2014. A total of 5,334 questionnaires were completed among Hull residents aged 16+ years (2.6% of population) between September and December 2014. Survey responders were broadly representative of Hull's population in terms of age, gender, area, deprivation and employment.

The aim of the 2014 Prevalence Survey was to examine health status, and health related behaviour in a representative sample of Hull's adult (16 years and over) population. The intention is that commissioners can use the findings to help improve health services and reduce inequalities for the people of Hull.

Surveys examining health and lifestyles have been completed in Hull every 3-4 years since 2003. The current Prevalence Survey 2014 used a similar survey methodology and questionnaire so that trends over time could be compared.

4 METHODS

Quota sampling was used to ensure that the survey responders were broadly similar to Hull's overall population. An assisted self-completion ('knock and drop') approach was used where teams of fieldwork staff called on residents in their own homes, and invited them to complete a questionnaire. They arranged to call back at an agreed time to collect the completed questionnaire. Assistance was available to complete the questionnaire if required. A total of 5,334 questionnaires were completed (representing around 2.6% of Hull's 16+ population).

5 RESULTS

5.1 Comparison with general population (representativeness)

Survey responders were broadly representative of Hull's population in terms of age, gender, area, deprivation and employment.

5.2 Diet

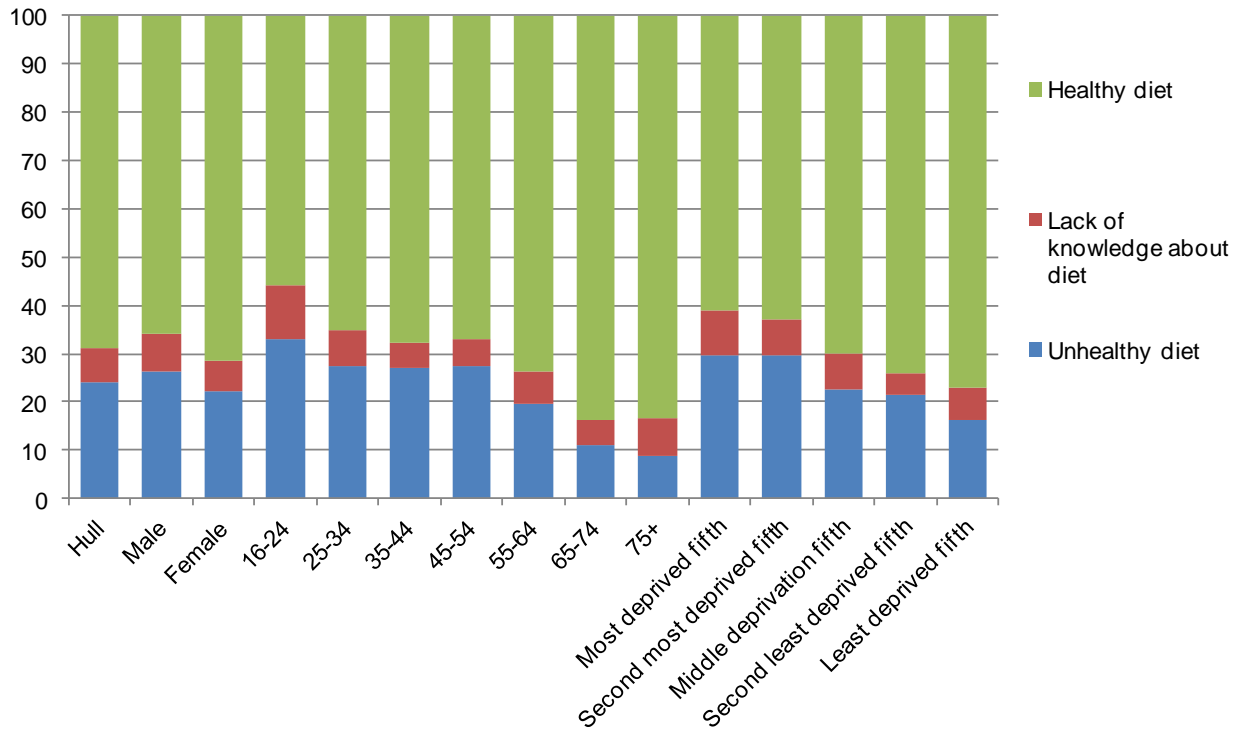
5.2.1 Latest prevalence estimate in Hull

Overall, 23.9% stated they did not have a healthy diet and a further 7.2% stated they "don't know what a healthy diet is" or "don't know if I have a healthy diet" with the remaining 68.9% stating they did have a healthy diet as illustrated in **Figure 1**.

Men were more likely to have to report not having a healthy diet compared to women (65.7% versus 71.6%), as well as reporting a lack of knowledge about what constitutes a healthy diet (8.1% versus 6.4%). Dietary behaviour and knowledge was worse among the younger survey responders, with one-third of 16-24 year olds reporting that they did not eat a health diet compared to 8.7% of those aged 75+ years. A further 11.2% of 16-24 year olds reported a lack of knowledge about diet compared to around 5% of those aged 35-74 years (although it was 6.7% among those aged 55-64 years), and slightly higher for those aged 25-34 years (7.3%) and 75+ years (8.0%).

There was also a strong association with diet and deprivation. Just under 30% of survey responders reported that they ate an unhealthy diet among those living in the most deprived fifth of area compared to around half this (16.4%) among those living in the least deprived fifth of areas. There was also a difference in the percentage reporting a lack of knowledge about what constituted a healthy diet (9.3% and 6.4% in most and least deprived fifths respectively).

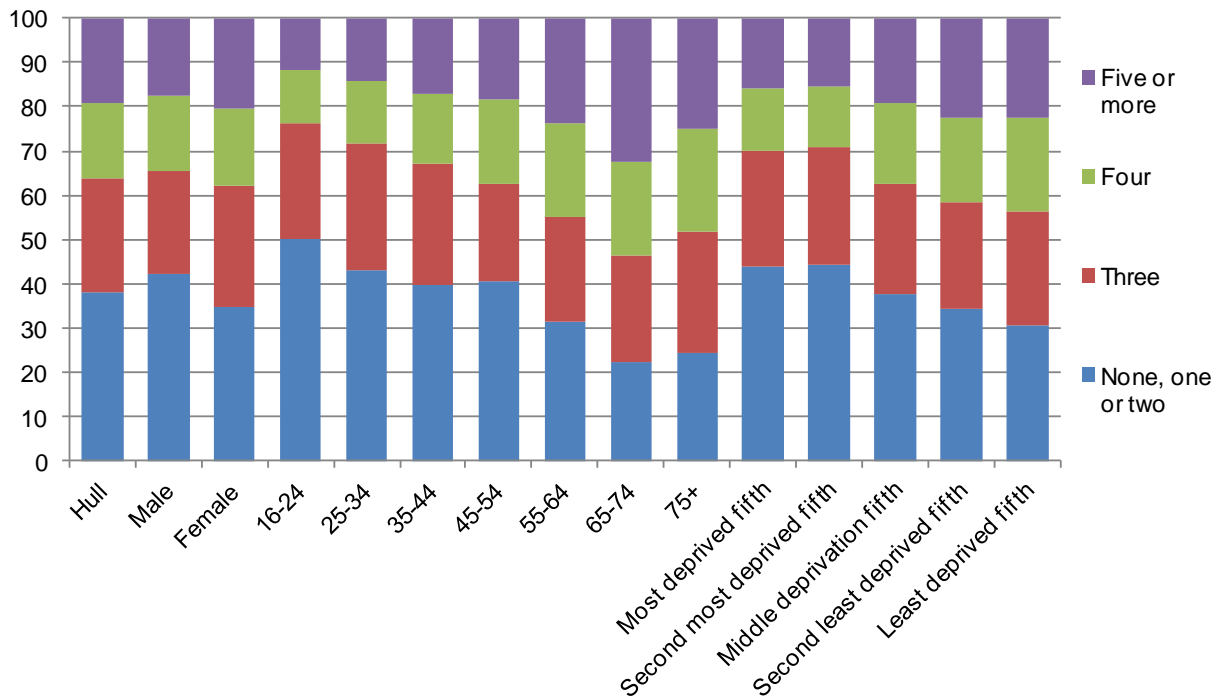
Figure 1: Healthy eating, 2014



Survey responders were also asked how many portions of fruit or vegetables they, in general, ate each day. They were given examples of what constituted a portion. One in five (19.2%) of survey responders ate five or more portions of fruit and vegetables each day (5-A-DAY) as illustrated in **Figure 2**. Almost four in ten (38.0%) only ate zero, one or two portions daily (6.7% ate zero, 12.4% ate one and 18.9% ate two portions). Women were more likely to eat 5-A-DAY compared to men (20.5% versus 17.6%) as were older survey responders (around 25% of those aged 55-64 years and 75+ years and 32.5% of those aged 65-74 years) compared to 12.0% of those aged 16-24 years. Half of those aged 16-24 years generally ate zero, one or two portions only compared to less than one-quarter of those aged 65+ years.

There was also an association with deprivation, with around 15% of those in the most and second most deprived fifths eating 5-A-DAY compared to 22% for the least and second least deprived fifth. Three in ten survey responders ate zero, one or two portions of fruit and vegetables daily among those living in the least deprived areas compared to 44% among those in the most deprived areas.

Figure 2: 5-A-DAY, 2014



5.2.2 Prevalence across the wards

Table 1 gives the percentage with stating they have and do not have a healthy diet and the percentage reporting a lack of knowledge about what constitutes a healthy diet across the 23 wards in Hull. As some of the numbers surveyed within each ward are relatively small, there will be some random variation associated with the estimate (that is, if another survey was completed immediately following the current survey slightly different estimates would be obtained as slightly different people would have been surveyed even though there would have been not true or real change in the underlying prevalence for that ward). A range of values (95% confidence intervals¹) have been given as well as the estimate of the prevalence for each ward. If these ranges do not overlap then the difference in the prevalence estimates will be statistically significant. Thus, for example, the prevalence of eating a healthy diet in St Andrew’s is statistically significantly lower than that for Pickering as there is no overlap in the sets of confidence intervals.

The estimated population aged 16+ years is presented (from the Office for National Statistics mid-year 2013 estimates) together with an estimate of the number of people in each ward who have do and do not have a healthy diet and report a lack of knowledge. It is estimated that around 50,000 people in Hull do not have a healthy diet and a further 15,000 do not know what constitutes a healthy diet.

¹ The 95% confidence intervals have been calculated using statistical methods to give a range of likely values for the prevalence. We are 95% confident that the interval obtained (from the survey sample) will contain the true underlying prevalence for that ward. If the CI is wide then there is a degree of uncertainty around the prevalence, and caution should be used when interpreting the findings.

Over 30% of survey responders from Bransholme West, and Orchard Park and Greenwood wards report eating an unhealthy diet. Orchard Park and Greenwood, together with Myton, also report the highest percentages (over 10%) having a lack of knowledge about what constitutes a healthy diet. Over 3,000 adult residents in each of Orchard Park and Greenwood, Marfleet, Myton and Newland are estimated to have an unhealthy diet, and another further 1,000 residents each living in Orchard Park and Greenwood ward and Marfleet ward report having a lack of knowledge about diet.

Table 2 presents the equivalent information in relation to the number of portions of fruit and vegetables generally eaten each day, although the total estimates for Hull have only been calculated for the 0-2 and 5+ categories. It is estimated that approximately 14,000 people in Hull usually eat no fruit and vegetables, 25,800 usually eat only one portion of fruit and vegetables daily, 39,400 eat two portions, 53,500 eat three portions, 25,900 eat four portions and 40,000 eat five or more portions of fruit and vegetables daily.

Fewer than 15% of survey responders report eating 5-A-DAY in Bransholme East, Bransholme West, Orchard Park and Greenwood, Marfleet, Myton and Newington wards compare to 27% or more in Beverley and Holderness.

Table 1: Healthy diet or not across the wards in Hull

Area	Number of survey responders	Prevalence (95% confidence interval)			Total estimated population aged 16+ years			
		Healthy diet	Not a healthy diet	Lack of knowledge about diet	Total	Estimated with		
						Healthy diet	Not a healthy diet	Lack of knowledge about diet
Bransholme East	214	65.4 (58.8, 71.5)	25.2 (19.9, 31.5)	9.3 (6.1, 14.0)	7,681	5,025	1,938	718
Bransholme West	141	60.3 (52.0, 68.0)	31.9 (24.8, 40.0)	7.8 (4.4, 13.4)	6,423	3,872	2,050	501
Kings Park	201	74.6 (68.2, 80.1)	19.4 (14.5, 25.4)	6.0 (3.4, 10.1)	8,637	6,446	1,676	516
Area: North Carr	556	67.4 (63.4, 71.2)	24.8 (21.4, 28.6)	7.7 (5.8, 10.3)	22,741	15,342	5,664	1,735
Beverley	175	81.1 (74.7, 86.2)	14.3 (9.9, 20.2)	4.6 (2.3, 8.8)	7,268	5,897	1,038	332
Orchard Park & Greenwood	295	58.3 (52.6, 63.8)	31.5 (26.5, 37.0)	10.2 (7.2, 14.1)	10,141	5,913	3,197	1,031
University	288	66.0 (60.3, 71.2)	25.3 (20.7, 30.7)	8.7 (5.9, 12.5)	8,396	5,539	2,128	729
Area: Northern	758	66.5 (63.1, 69.8)	25.2 (22.2, 28.4)	8.3 (6.6, 10.5)	25,805	17,349	6,363	2,092
North Hull	1,314	66.9 (64.3, 69.4)	25.0 (22.8, 27.5)	8.1 (6.7, 9.7)	48,546	32,692	12,027	3,827
Ings	224	74.1 (68.0, 79.4)	21.0 (16.2, 26.8)	4.9 (2.8, 8.6)	9,917	7,349	2,081	487
Longhill	225	67.1 (60.7, 72.9)	26.2 (20.9, 32.3)	6.7 (4.1, 10.7)	9,261	6,215	2,428	617
Sutton	259	72.2 (66.5, 77.3)	24.3 (19.5, 29.9)	3.5 (1.8, 6.5)	10,172	7,344	2,474	353
Area: East	708	71.2 (67.7, 74.4)	23.9 (20.9, 27.1)	4.9 (3.6, 6.8)	29,350	20,909	6,984	1,458
Holderness	251	80.5 (75.1, 84.9)	14.7 (10.9, 19.7)	4.8 (2.8, 8.2)	10,734	8,639	1,582	513
Marfleet	244	61.5 (55.2, 67.4)	28.7 (23.4, 34.7)	9.8 (6.7, 14.2)	10,605	6,519	3,042	1,043
Southcoates East	182	65.4 (58.2, 71.9)	26.4 (20.5, 33.2)	8.2 (5.1, 13.2)	6,365	4,162	1,679	525
Southcoates West	131	74.8 (66.7, 81.5)	18.3 (12.6, 25.8)	6.9 (3.7, 12.5)	6,419	4,802	1,176	441
Area: Park	808	70.4 (67.2, 73.5)	22.2 (19.4, 25.1)	7.4 (5.8, 9.4)	34,123	24,122	7,479	2,522
Drypool	247	67.6 (61.5, 73.1)	27.5 (22.3, 33.4)	4.9 (2.8, 8.3)	10,676	7,218	2,939	519
East Hull	1,763	70.3 (68.2, 72.4)	23.6 (21.7, 25.6)	6.1 (5.0, 7.3)	74,149	52,249	17,402	4,498
Myton	318	57.5 (52.1, 62.9)	29.9 (25.1, 35.1)	12.6 (9.4, 16.7)	13,561	7,804	4,051	1,706
Newington	243	65.4 (59.3, 71.1)	25.9 (20.8, 31.8)	8.6 (5.7, 12.8)	8,940	5,850	2,318	773

Area	Number of survey responders	Prevalence (95% confidence interval)			Total estimated population aged 16+ years			
		Healthy diet	Not a healthy diet	Lack of knowledge about diet	Total	Estimated with		
						Healthy diet	Not a healthy diet	Lack of knowledge about diet
St Andrew's	157	62.4 (54.6, 69.6)	29.9 (23.3, 37.5)	7.6 (4.4, 12.9)	6,572	4,102	1,967	502
Area: Riverside	965	62.9 (59.8, 65.9)	28.3 (25.5, 31.2)	8.8 (7.2, 10.8)	39,749	24,974	11,276	3,499
Boothferry	203	72.9 (66.4, 78.6)	20.7 (15.7, 26.8)	6.4 (3.8, 10.6)	9,879	7,202	2,044	633
Derringham	237	71.7 (65.7, 77.1)	20.7 (16.0, 26.3)	7.6 (4.9, 11.7)	9,369	6,720	1,937	712
Pickering	276	77.2 (71.9, 81.7)	17.4 (13.4, 22.3)	5.4 (3.3, 8.8)	9,279	7,161	1,614	504
Area: West	716	74.2 (70.8, 77.2)	19.4 (16.7, 22.5)	6.4 (4.9, 8.5)	28,527	21,084	5,595	1,849
Avenue	269	75.1 (69.6, 79.9)	20.8 (16.4, 26.1)	4.1 (2.3, 7.2)	11,074	8,316	2,305	453
Bricknell	177	78.5 (71.9, 83.9)	14.1 (9.8, 20.0)	7.3 (4.3, 12.2)	6,794	5,335	960	499
Newland	303	63.7 (58.1, 68.9)	29.4 (24.5, 34.7)	6.9 (4.6, 10.4)	10,280	6,548	3,020	712
Area: Wyke	749	71.3 (68.0, 74.4)	22.7 (19.8, 25.8)	6.0 (4.5, 7.9)	28,148	20,199	6,285	1,664
West Hull	2,183	68.9 (67.0, 70.8)	23.5 (21.8, 25.4)	7.5 (6.5, 8.7)	85,748	59,039	20,216	6,494
HULL	5,261	68.9 (67.6, 70.1)	23.9 (22.8, 25.1)	7.2 (6.5, 7.9)	208,443	143,979	49,645	14,819

Table 2: Daily portions of fruit and vegetables across the wards in Hull

Area	Number of survey responders	Prevalence (95% confidence interval)				Total estimated population aged 16+ years eating	
		Zero, one or two portions	Three portions	Four portions	Five or more portions	Zero, one or two portions	Five or more portions
Bransholme East	208	41.3 (34.9, 48.1)	30.8 (24.9, 37.3)	13.5 (9.5, 18.8)	14.4 (10.3, 19.8)	3,176	1,108
Bransholme West	136	47.8 (39.6, 56.1)	21.3 (15.3, 28.9)	16.2 (10.9, 23.3)	14.7 (9.7, 21.6)	3,070	945
Kings Park	200	32.0 (25.9, 38.8)	28.0 (22.2, 34.6)	21.0 (15.9, 27.2)	19.0 (14.2, 25.0)	2,764	1,641
Area: North Carr	544	39.5 (35.5, 43.7)	27.4 (23.8, 31.3)	16.9 (14.0, 20.3)	16.2 (13.3, 19.5)	9,009	3,693
Beverley	174	27.6 (21.5, 34.7)	21.3 (15.8, 27.9)	24.1 (18.4, 31.0)	27.0 (21.0, 34.1)	2,005	1,963
Orchard Park & Greenwood	273	47.6 (41.8, 53.5)	24.2 (19.5, 29.6)	13.6 (10.0, 18.1)	14.7 (10.9, 19.3)	4,829	1,486
University	280	41.4 (35.8, 47.3)	26.1 (21.3, 31.5)	16.1 (12.2, 20.8)	16.4 (12.5, 21.2)	3,478	1,379
Area: Northern	727	40.4 (36.9, 44.0)	24.2 (21.2, 27.5)	17.1 (14.5, 20.0)	18.3 (15.7, 21.3)	10,312	4,828
North Hull	1,271	40.0 (37.4, 42.8)	25.6 (23.2, 28.0)	17.0 (15.0, 19.2)	17.4 (15.4, 19.6)	19,322	8,522
Ings	215	33.0 (27.1, 39.6)	24.2 (18.9, 30.3)	21.9 (16.9, 27.9)	20.9 (16.0, 26.9)	3,275	2,076
Longhill	215	37.2 (31.0, 43.8)	27.4 (21.9, 33.8)	13.0 (9.2, 18.2)	22.3 (17.3, 28.4)	3,446	2,068
Sutton	254	36.6 (30.9, 42.7)	25.6 (20.6, 31.3)	21.3 (16.7, 26.7)	16.5 (12.5, 21.6)	3,724	1,682
Area: East	684	35.7 (32.2, 39.3)	25.7 (22.6, 29.1)	18.9 (16.1, 22.0)	19.7 (16.9, 22.9)	10,445	5,825
Holderness	248	24.2 (19.3, 29.9)	27.0 (21.9, 32.9)	21.4 (16.7, 26.9)	27.4 (22.2, 33.3)	2,597	2,943
Marfleet	224	45.1 (38.7, 51.6)	27.7 (22.2, 33.9)	13.8 (9.9, 19.0)	13.4 (9.5, 18.5)	4,782	1,420
Southcoates East	174	39.7 (32.7, 47.1)	23.6 (17.9, 30.4)	14.9 (10.4, 21.0)	21.8 (16.3, 28.6)	2,524	1,390
Southcoates West	126	40.5 (32.3, 49.2)	23.0 (16.5, 31.1)	15.9 (10.5, 23.2)	20.6 (14.5, 28.5)	2,598	1,325
Area: Park	772	36.4 (33.1, 39.9)	25.8 (22.8, 29.0)	16.8 (14.4, 19.6)	21.0 (18.3, 24.0)	12,501	7,078
Drypool	237	41.4 (35.3, 47.7)	23.6 (18.7, 29.4)	17.7 (13.4, 23.1)	17.3 (13.0, 22.6)	4,415	1,847
East Hull	1,693	36.8 (34.5, 39.1)	25.5 (23.4, 27.6)	17.8 (16.0, 19.7)	20.0 (18.1, 21.9)	27,361	14,750

Area	Number of survey responders	Prevalence (95% confidence interval)				Total estimated population aged 16+ years eating	
		Zero, one or two portions	Three portions	Four portions	Five or more portions	Zero, one or two portions	Five or more portions
Myton	302	49.3 (43.7, 54.9)	24.2 (19.7, 29.3)	13.2 (9.9, 17.5)	13.2 (9.9, 17.5)	6,691	1,796
Newington	227	42.7 (36.5, 49.2)	27.8 (22.3, 33.9)	15.4 (11.3, 20.7)	14.1 (10.2, 19.2)	3,820	1,260
St Andrew's	144	38.2 (30.7, 46.3)	27.8 (21.1, 35.6)	16.7 (11.5, 23.6)	17.4 (12.0, 24.4)	2,510	1,141
Area: Riverside	910	43.8 (40.7, 47.1)	25.5 (22.8, 28.4)	15.5 (13.3, 18.0)	15.2 (13.0, 17.6)	17,436	6,044
Boothferry	197	33.0 (26.8, 39.8)	22.8 (17.5, 29.2)	19.8 (14.8, 25.9)	24.4 (18.9, 30.8)	3,260	2,407
Derringham	229	36.2 (30.3, 42.7)	24.5 (19.3, 30.4)	17.9 (13.5, 23.4)	21.4 (16.6, 27.2)	3,396	2,005
Pickering	269	31.2 (26.0, 37.0)	28.3 (23.2, 33.9)	15.2 (11.4, 20.0)	25.3 (20.5, 30.8)	2,898	2,346
Area: West	695	33.4 (30.0, 37.0)	25.5 (22.4, 28.8)	17.4 (14.8, 20.4)	23.7 (20.7, 27.0)	9,553	6,757
Avenue	267	31.1 (25.8, 36.9)	25.8 (21.0, 31.4)	18.4 (14.2, 23.4)	24.7 (19.9, 30.2)	3,442	2,737
Bricknell	176	29.5 (23.3, 36.7)	28.4 (22.3, 35.5)	19.9 (14.7, 26.4)	22.2 (16.7, 28.9)	2,007	1,505
Newland	293	43.0 (37.5, 48.7)	24.6 (20.0, 29.8)	17.4 (13.5, 22.2)	15.0 (11.4, 19.6)	4,421	1,544
Area: Wyke	736	35.5 (32.1, 39.0)	26.0 (22.9, 29.2)	18.3 (15.7, 21.3)	20.2 (17.5, 23.3)	9,871	5,787
West Hull	2,104	37.7 (35.7, 39.8)	25.9 (24.0, 27.8)	16.9 (15.3, 18.5)	19.5 (17.9, 21.3)	32,444	16,741
HULL	5,069	38.0 (36.7, 39.3)	25.6 (24.5, 26.9)	17.2 (16.2, 18.3)	19.2 (18.1, 20.3)	79,127	40,013

5.2.3 Trends in prevalence and comparison with England

Figure 4 illustrates the trends over time in the percentage reporting that they eat a healthy diet (together with 95% confidence intervals – see **footnote 1**). In 2004, 61.6% reported that they ate a healthy diet and this increased to 74.7% in 2007 and 79.3% in 2009, but decreased to 71.8% in 2011-12 and to 68.9% for the current 2014 survey.

Figure 3: Trends in the prevalence of healthy diet, Hull

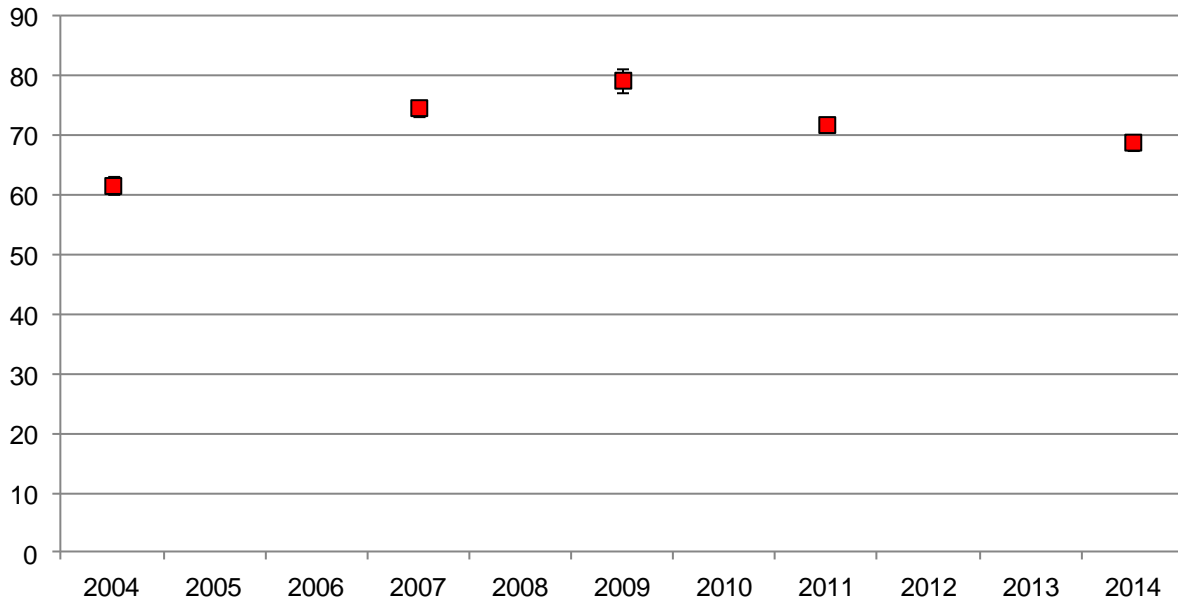
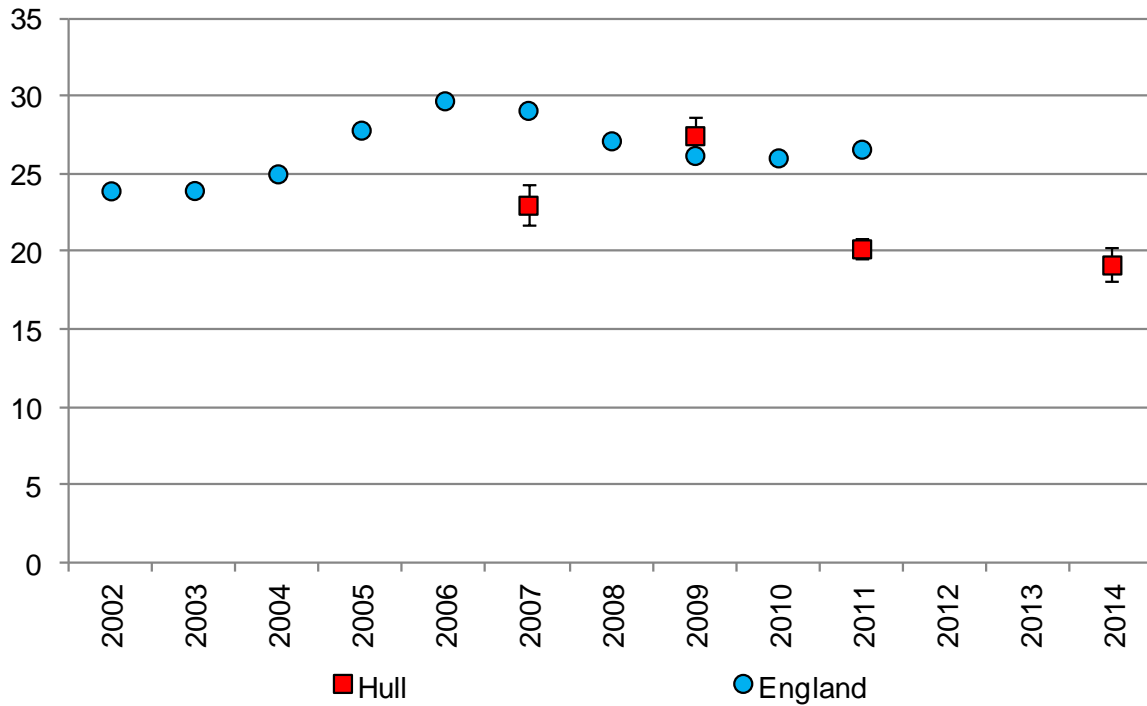


Figure 4 illustrates the trends over time for Hull and England for the percentage eating 5-A-DAY (together with 95% confidence intervals for Hull – see **footnote 1**). The percentage eating 5-A-DAY was 23.0% in the 2007 survey which increased to 27.5% in the 2009 survey and fell to 20.2% in the 2011-12 survey and then to 19.2% in the current 2014 survey. The trend for England increased between 2002 and 2006 (from 23.9% to 29.7%) and has since decreased to 2010 (26.0%) although there was a slight increase between 2010 and 2011 (26.6%) which was the latest year for which data is available for England.

Figure 4: Trends in the prevalence of 5-A-DAY, Hull versus England



5.3 Physical activity

The national guidelines for physical activity have changed over time, although in general adults are still recommended to undertake 2.5 hours of physical activity per week. The previous guidelines stated that that the moderate or vigorous physical activity undertaken in the day needed to last at least 30 minutes and should be undertaken on at least five days per week, but 2012 guidelines state that the moderate physical activity can be made up of 'bouts of physical activity' of 10 minutes or more. So there are differences in the intensity and the duration of each physical activity session. In 2012, the physical activity needed to be at a moderate level to fulfil the guidelines (or half the time if the physical activity was at a vigorous level). Furthermore, in 2012, the guidelines additionally stated that muscle-strengthening physical activity should be undertaken on at least two days per week.

For comparability with previous local surveys, questions were included on the frequency of undertaking physical activity for at least 30 minutes for different levels of physical activity separately (vigorous, moderate and light) with examples of some types of physical activity for the different levels of physical activity. The 2007, 2011-12 and 2014 surveys asked about the frequency of these physical activity levels with response categories: never, once or twice a week, three or four times a week, and five or more times a week, and in order to estimate if the survey responder fulfilled the 2011 national guidelines it was assumed that an average of 0, 1.5, 3.5 and 5 sessions per week were undertaken respectively. The total number of times per week was summed over vigorous physical activity and moderate physical activity to give an

estimate of the number of times per week vigorous or moderate physical activity was undertaken. Individuals were then classified into four groups: (i) fulfils national physical activity guidelines (vigorous or moderate physical activity of 30 minutes or more, five or more times a week); (ii) vigorous or moderate physical activity of 30 minutes or more but fewer than five times a week; (iii) light physical activity only (in sessions of 30+ minutes); and (iv) never undertakes physical activity (in session of 30+ minutes).

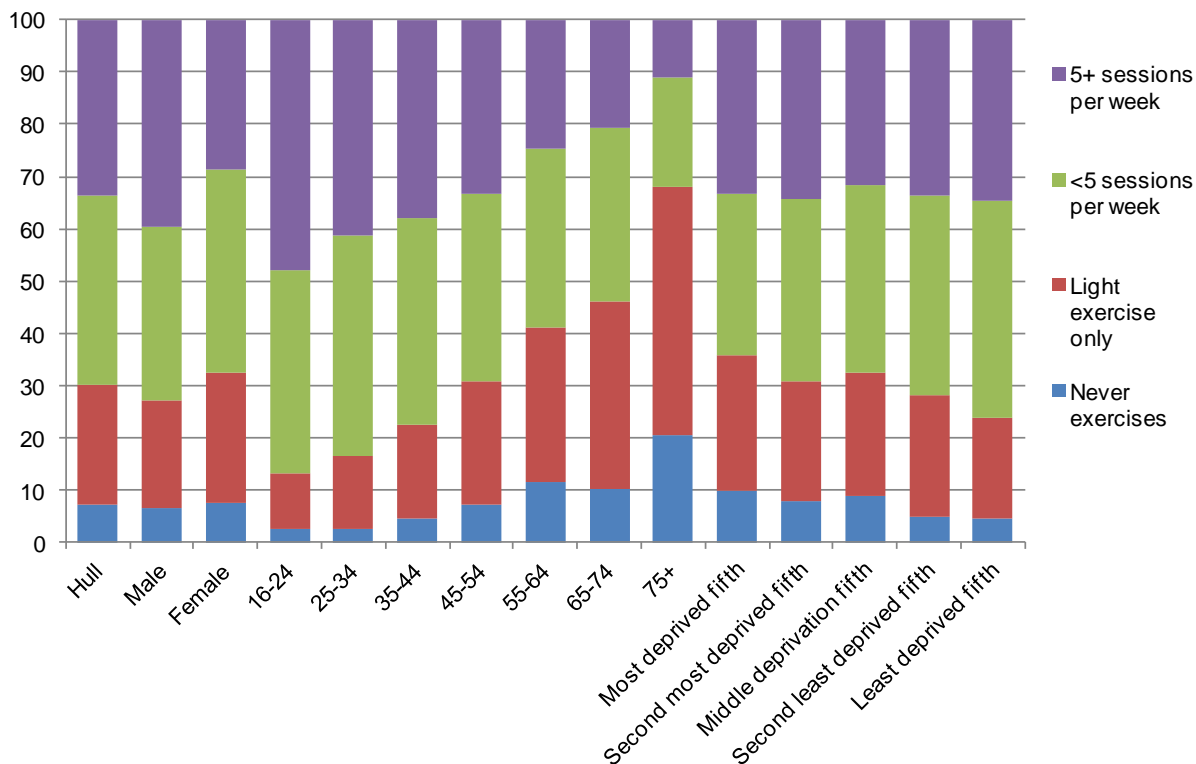
A further question asked the survey responders to state separately for vigorous and moderate physical activity levels, the number of minutes of exercise or physical activity for each day over the previous seven days. The estimate can be used to assess compliance with the '150 minute' component of the 2012 national physical activity guidelines. The question was relatively complex, so to avoid further complexity, survey responders were not asked to only include physical activity bouts of ten minutes or more (just the sum of all physical activity at that intensity for each day). The current 2014 survey does not ask about the types of physical activity or specifically about muscle-strengthening physical activity (but nor does national surveys), so this component of the 2012 national physical activity guidelines cannot be assessed locally (or nationally).

5.3.1 Latest prevalence estimate in Hull

Based on the 2011 physical activity guidelines of undertaking physical activity in sessions of 30 minutes or more, 33.5% undertook sessions of moderate or vigorous physical activity five or more times a week, a further 36.3% undertook physical activity at this level but fewer than five times a week, 22.9% did not undertaken physical activity (in sessions of 30+ minutes) at a moderate or vigorous level but at a 'light' level only, and 7.2% never undertook physical activity in sessions of 30 minutes or more at a light, moderate or vigorous level as illustrated in **Figure 5**. Men were more likely to undertake physical activity to fulfil the 2011 national guidelines with 39.5% undertaking 30+ minute sessions of moderate or vigorous physical activity five or more times a week compared to 28.5% of women. Women were more likely to undertake physical activity to this level in 30+ minute sessions fewer than five times a week (38.8% versus 33.2%), but were also more likely to undertake only light physical activity (24.9% versus 20.6%) and never undertake physical activity (7.7% versus 6.6%). There was a strong association with age. Almost half (48.0%) of those aged 16-24 years fulfilled the 2011 national guidelines but this was one in nine (11.1%) among those aged 75+ years. Less than 3% of those aged under 35 years never undertook physical activity for 30+ minutes at a light, moderate or vigorous level, but one in five (20.5%) of those aged 75+ years did so.

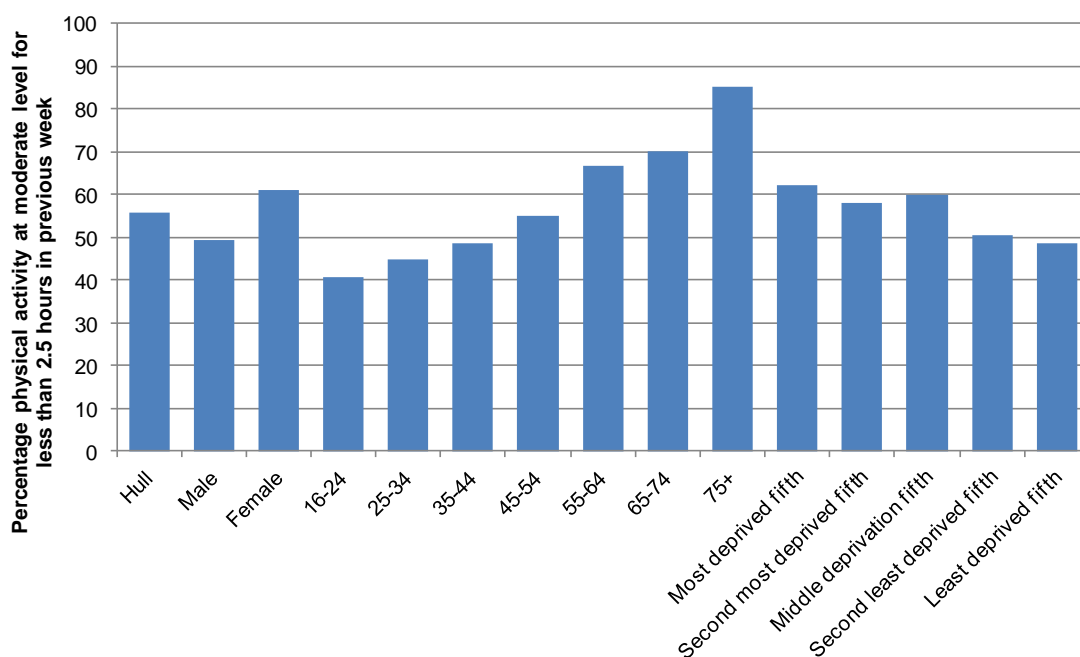
There was an association with physical activity and deprivation. Similar percentages fulfilled the 2011 national guidelines (range 31.5% to 34.7% across the deprivation fifths), but a higher percentage in the least deprived fifth of areas undertook 30+ minute sessions of moderate or vigorous physical activity fewer than five times a week (41.5%) compared to the most deprived fifth (30.8%). Survey responders living in the most deprived fifth of areas were more likely to undertake light physical activity only (25.9% versus 19.1%) and never undertake physical activity (9.9% versus 4.7%).

Figure 5: Physical activity levels (2011 guidelines), 2014



Based on estimates more comparable to the 2012 physical activity guidelines, 55.6% did not fulfil these guidelines (**Figure 6**). More women did insufficient physical activity compared to men (60.9% versus 29.5%) as did older survey responders (85.2% of those aged 75+ years compared to 40.8% of those aged 16-24 years). There was also an association with deprivation with 62.0% of those living in the most deprived fifth of areas of Hull undertaking insufficient physical activity compared to 48.5% of those who lived in the least deprived fifth of areas.

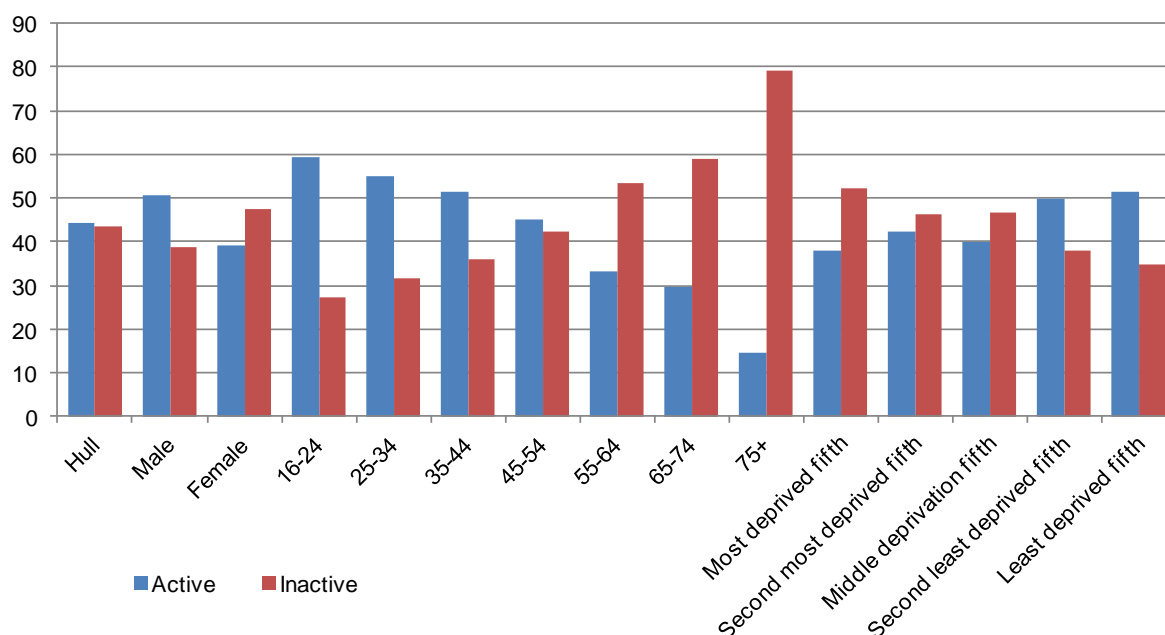
Figure 6: Percentage not fulfilling 2012 physical activity guidelines, 2014



The Public Health Outcomes Framework has two indicators for physical activity among adults. One relates to the percentages who are “active” and fulfil the ‘150 minute’ component of the 2012 national physical activity guidelines, and the other relates to the percentage of people who are “inactive” who undertake fewer than 30 minutes of moderate physical activity per week (both are based on average amounts of physical activity per week based on previous 28 day period). So whilst the definitions are not directly comparable, it is possible to examine the percentage of physically active and inactive survey responders, and this is illustrated in **Figure 7**.

The percentages who were not active have already been discussed above in relation to **Figure 6** (overall 44.4% were active which was higher among males 50.5% compared to females 39.1% with a strong association with age ranging from 59.2% among those aged 16-24 years to 14.8% among those aged 75+ years). Unsurprisingly, a similar reverse pattern occurred in relation to the percentage who were classified as inactive. Overall, 43.5% were classified as inactive as they undertook fewer than 30 minutes of moderate physical activity the previous week. This was higher among females at 47.5% compared to males at 38.8%, and much higher among those who were aged 75+ years at 79.2% compared to 27.3% among those aged 16-24 years. Just over a half of survey responders in the most deprived fifth of areas were inactive (52.0%) compared to just over one-third of survey responders in the least deprived fifth of areas (34.9%).

Figure 7: Physical activity levels (Public Health Outcomes Framework), 2014



5.3.2 Prevalence across the wards

Table 3 give the prevalence of the different physical activity levels based on the 2011 and 2012 national physical activity guidelines across the wards in Hull. A range of values (95% confidence intervals – see **footnote 1**) have been given as well as the estimate of the prevalence for each ward. If these ranges do not overlap then the difference in the prevalence estimates will be statistically significant.

The highest percentages fulfilling the 2011 national guidelines levels were in Bransholme West (39.0%), Newland (39.1%) and Avenue (39.3%) with the lowest percentages in Ing (26.2%), Derringham (27.7%), Drypool (27.8%), Bricknell (28.2%), Bransholme East (29.0%) and Sutton (29.1%). The highest percentages of survey responders who never undertook physical activity at a light, moderate or vigorous level in 30+ minute sessions were for Pickering (10.2%), Newington (11.1%) and Bransholme East (11.5%) wards.

Based on the 2012 national physical activity guidelines, Southcoates West (59.5%), University (55.9%) and Boothferry (54.7%) had the highest percentage of survey responders fulfilling the guidelines and St Andrew's (35.3%), Derringham (35.7%) and Pickering (36.9%) had the lowest percentages.

In terms of the Public Health Outcomes Framework indicator of being inactive (fewer than 30 minutes of moderate physical activity per week), St Andrew's (56.6%), Myton (52.2%) and Newington (52.0%) had the highest percentages and University (30.1%), Southcoates West (30.6%) and Newland (31.6%) had the lowest percentages.

The total population aged 16+ years as at mid-year 2013 (obtained from official Office for National Statistics data sources) has been used, together with the prevalence, to estimate the total number of people in each ward for each physical activity level (**Table 4**).

Based on the 2011 national physical activity guidelines, it is estimated that around 70,000 people in Hull would have fulfilled the 2011 guidelines, a further 75,700 are undertaking physical activity at a moderate or vigorous level in 30+ minute sessions but fewer than five times a week, 47,800 are undertaking physical activity to a light level only (30+ minute sessions) and 15,100 are never undertaking physical activity at a light, moderate or vigorous level in sessions lasting 30 minutes or more.

Based on the 2012 national physical activity guidelines, it is estimated that around 92,434 people fulfil the 2012 guidelines (and the remaining 116,009 do not which includes 90,743 who are classified as inactive).

Table 3: Prevalence of physical activity levels across the wards in Hull

Area	Number of survey responders	Based on 2011 national physical activity guidelines or 30+ minute sessions of moderate or vigorous physical activity				Number of survey responders	Based on 2012 national physical activity guidelines (minutes of moderate activity per week)	
		5+ times a week	<5 times a week	Light physical activity only	Never		“Inactive” (<30 minutes per week)	“Active” (2.5+ hours per week)
Bransholme East	217	29.0 (23.4, 35.4)	39.2 (32.9, 45.8)	20.3 (15.5, 26.1)	11.5 (7.9, 16.5)	191	48.2 (41.2, 55.2)	37.7 (31.1, 44.7)
Bransholme West	141	39.0 (31.3, 47.2)	28.4 (21.6, 36.3)	25.5 (19.1, 33.3)	7.1 (3.9, 12.6)	131	44.3 (36.1, 52.8)	42.0 (33.9, 50.5)
Kings Park	204	36.8 (30.4, 43.6)	44.1 (37.5, 51.0)	14.7 (10.5, 20.2)	4.4 (2.3, 8.2)	194	33.0 (26.8, 39.9)	50.5 (43.5, 57.5)
Area: North Carr	562	34.3 (30.5, 38.4)	38.3 (34.3, 42.3)	19.6 (16.5, 23.1)	7.8 (5.9, 10.3)	516	41.5 (37.3, 45.8)	43.6 (39.4, 47.9)
Beverley	176	37.5 (30.7, 44.8)	35.8 (29.1, 43.1)	22.2 (16.7, 28.9)	4.5 (2.3, 8.7)	159	38.4 (31.2, 46.1)	47.2 (39.6, 54.9)
Orchd Pk & Grnwd	290	36.2 (30.9, 41.9)	29.3 (24.4, 34.8)	26.6 (21.8, 31.9)	7.9 (5.3, 11.6)	249	47.8 (41.7, 54.0)	42.6 (36.6, 48.8)
University	286	37.4 (32.0, 43.2)	38.1 (32.7, 43.9)	19.2 (15.1, 24.2)	5.2 (3.2, 8.5)	236	30.1 (24.6, 36.2)	55.9 (49.6, 62.1)
Area: Northern	752	37.0 (33.6, 40.5)	34.2 (30.9, 37.6)	22.7 (19.9, 25.9)	6.1 (4.6, 8.1)	644	39.0 (35.3, 42.8)	48.6 (44.8, 52.5)
North Hull	1,314	35.8 (33.3, 38.5)	35.9 (33.4, 38.6)	21.4 (19.3, 23.7)	6.8 (5.6, 8.3)	1,160	40.1 (37.3, 42.9)	46.4 (43.5, 49.3)
Ings	225	26.2 (20.9, 32.3)	39.6 (33.4, 46.1)	26.7 (21.3, 32.8)	7.6 (4.8, 11.8)	213	49.8 (43.1, 56.4)	39.4 (33.1, 46.1)
Longhill	227	31.3 (25.6, 37.6)	36.1 (30.2, 42.6)	24.7 (19.5, 30.7)	7.9 (5.1, 12.2)	215	48.4 (41.8, 55.0)	38.6 (32.4, 45.3)
Sutton	261	29.1 (23.9, 34.9)	37.9 (32.3, 44.0)	26.4 (21.5, 32.1)	6.5 (4.1, 10.2)	235	44.7 (38.5, 51.1)	43.8 (37.6, 50.2)
Area: East	713	28.9 (25.7, 32.3)	37.9 (34.4, 41.5)	25.9 (22.9, 29.3)	7.3 (5.6, 9.4)	663	47.5 (43.7, 51.3)	40.7 (37.0, 44.5)
Holderness	250	36.0 (30.3, 42.1)	40.0 (34.1, 46.2)	21.2 (16.6, 26.7)	2.8 (1.4, 5.7)	214	37.4 (31.2, 44.0)	53.7 (47.1, 60.3)
Marfleet	243	31.3 (25.8, 37.4)	35.4 (29.6, 41.6)	23.5 (18.6, 29.2)	9.9 (6.7, 14.3)	215	49.8 (43.1, 56.4)	38.1 (31.9, 44.8)
Southcoates East	186	37.1 (30.5, 44.2)	32.3 (26.0, 39.3)	23.1 (17.6, 29.7)	7.5 (4.5, 12.2)	172	48.3 (40.9, 55.7)	41.9 (34.7, 49.3)
Southcoates West	131	36.6 (28.9, 45.2)	41.2 (33.2, 49.8)	19.1 (13.3, 26.7)	3.1 (1.2, 7.6)	121	30.6 (23.1, 39.3)	59.5 (50.6, 67.8)
Area: Park	810	34.9 (31.7, 38.3)	37.0 (33.8, 40.4)	22.0 (19.3, 25.0)	6.0 (4.6, 7.9)	722	42.5 (39.0, 46.2)	47.2 (43.6, 50.9)
Drypool	245	27.8 (22.5, 33.7)	42.4 (36.4, 48.7)	22.0 (17.3, 27.6)	7.8 (5.0, 11.8)	217	45.2 (38.7, 51.8)	44.2 (37.8, 50.9)
East Hull	1,768	31.5 (29.4, 33.7)	38.1 (35.9, 40.4)	23.6 (21.7, 25.6)	6.8 (5.7, 8.1)	1,602	44.9 (42.5, 47.4)	44.1 (41.7, 46.6)

Area	Number of survey responders	Based on 2011 national physical activity guidelines or 30+ minute sessions of moderate or vigorous physical activity				Number of survey responders	Based on 2012 national physical activity guidelines (minutes of moderate activity per week)	
		5+ times a week	<5 times a week	Light physical activity only	Never		“Inactive” (<30 minutes per week)	“Active” (2.5+ hours per week)
Myton	321	37.1 (32.0, 42.5)	30.2 (25.5, 35.5)	24.0 (19.6, 28.9)	8.7 (6.1, 12.3)	278	52.2 (46.3, 58.0)	37.8 (32.3, 43.6)
Newington	244	30.3 (24.9, 36.4)	35.7 (29.9, 41.8)	23.0 (18.1, 28.6)	11.1 (7.7, 15.6)	221	52.0 (45.5, 58.5)	37.6 (31.4, 44.1)
St Andrew's	155	35.5 (28.4, 43.3)	26.5 (20.1, 33.9)	30.3 (23.6, 38.0)	7.7 (4.5, 13.0)	136	56.6 (48.2, 64.7)	35.3 (27.8, 43.6)
Area: Riverside	965	32.7 (29.9, 35.8)	34.1 (31.2, 37.1)	24.2 (21.7, 27.1)	8.9 (7.3, 10.9)	852	51.1 (47.7, 54.4)	39.0 (35.7, 42.3)
Boothferry	203	33.0 (26.9, 39.7)	39.4 (32.9, 46.3)	20.2 (15.3, 26.2)	7.4 (4.5, 11.8)	192	35.9 (29.5, 42.9)	54.7 (47.6, 61.6)
Derringham	238	27.7 (22.4, 33.7)	36.6 (30.7, 42.8)	26.5 (21.3, 32.4)	9.2 (6.2, 13.6)	213	51.6 (45.0, 58.3)	35.7 (29.6, 42.3)
Pickering	275	30.2 (25.1, 35.8)	32.7 (27.5, 38.5)	26.9 (22.0, 32.4)	10.2 (7.1, 14.3)	252	50.8 (44.7, 56.9)	36.9 (31.2, 43.0)
Area: West	716	30.2 (26.9, 33.6)	35.9 (32.5, 39.5)	24.9 (21.8, 28.2)	9.1 (7.2, 11.4)	657	46.7 (42.9, 50.6)	41.7 (38.0, 45.5)
Avenue	275	39.3 (33.7, 45.2)	34.9 (29.5, 40.7)	21.5 (17.0, 26.7)	4.4 (2.5, 7.5)	211	35.5 (29.4, 42.2)	49.3 (42.6, 56.0)
Bricknell	177	28.2 (22.1, 35.3)	42.4 (35.3, 49.7)	22.6 (17.1, 29.3)	6.8 (3.9, 11.5)	139	33.8 (26.5, 42.0)	50.4 (42.2, 58.5)
Newland	302	39.1 (33.7, 44.7)	38.1 (32.8, 43.7)	17.9 (14.0, 22.6)	5.0 (3.0, 8.0)	282	31.6 (26.4, 37.2)	52.8 (47.0, 58.6)
Area: Wyke	754	36.6 (33.2, 40.1)	37.9 (34.5, 41.4)	20.3 (17.6, 23.3)	5.2 (3.8, 7.0)	632	33.4 (29.8, 37.2)	51.1 (47.2, 55.0)
West Hull	2,190	33.8 (31.8, 35.8)	35.1 (33.1, 37.1)	23.3 (21.6, 25.2)	7.8 (6.8, 9.0)	1,924	44.4 (42.2, 46.7)	43.3 (41.1, 45.5)
HULL	5,273	33.5 (32.3, 34.8)	36.3 (35.0, 37.6)	22.9 (21.8, 24.1)	7.2 (6.6, 8.0)	4,686	43.5 (42.1, 44.9)	44.4 (42.9, 45.8)

Table 4: Estimated total number of people in Hull by physical activity levels across the wards

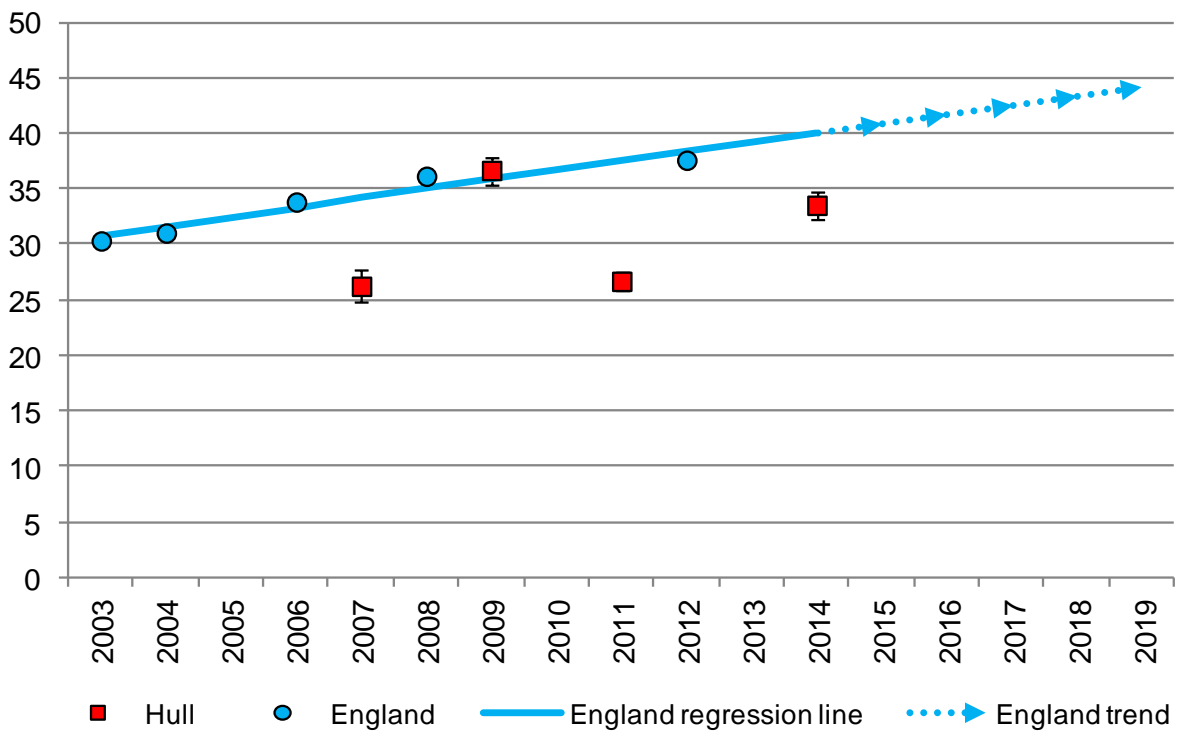
Area	Estimated total number of people aged 16+ years						
	Total people in Hull	Based on 2011 national physical activity guidelines or 30+ minute sessions of moderate or vigorous physical activity				Based on 2012 national physical activity guidelines (minutes of moderate activity per week)	
		5+ times a week	<5 times a week	Light physical activity only	Never	“Inactive” (<30 minutes per week)	“Active” (2.5+ hours per week)
Bransholme East	7,681	2,230	3,009	1,557	885	3,700	2,895
Bransholme West	6,423	2,505	1,822	1,640	456	2,844	2,697
Kings Park	8,637	3,175	3,810	1,270	381	2,849	4,363
Area: North Carr	22,741	7,810	8,700	4,451	1,780	9,431	9,916
Beverley	7,268	2,726	2,602	1,611	330	2,788	3,428
Orchd Pk & Grnwd	10,141	3,672	2,972	2,693	804	4,847	4,317
University	8,396	3,141	3,200	1,615	440	2,526	4,696
Area: Northern	25,805	9,540	8,819	5,868	1,578	10,058	12,542
North Hull	48,546	17,401	17,438	10,382	3,325	19,460	22,515
Ings	9,917	2,600	3,923	2,645	749	4,935	3,911
Longhill	9,261	2,897	3,345	2,285	734	4,480	3,575
Sutton	10,172	2,962	3,858	2,689	663	4,545	4,458
Area: East	29,350	8,480	11,114	7,615	2,141	13,945	11,952
Holderness	10,734	3,864	4,294	2,276	301	4,013	5,768
Marfleet	10,605	3,317	3,753	2,488	1,047	5,278	4,045
Southcoates East	6,365	2,361	2,053	1,471	479	3,071	2,664
Southcoates West	6,419	2,352	2,646	1,225	196	1,963	3,820
Area: Park	34,123	11,922	12,638	7,499	2,064	14,509	16,116
Drypool	10,676	2,963	4,532	2,353	828	4,821	4,723

Area	Estimated total number of people aged 16+ years						
	Total people in Hull	Based on 2011 national physical activity guidelines or 30+ minute sessions of moderate or vigorous physical activity				Based on 2012 national physical activity guidelines (minutes of moderate activity per week)	
		5+ times a week	<5 times a week	Light physical activity only	Never	“Inactive” (<30 minutes per week)	“Active” (2.5+ hours per week)
East Hull	74,149	23,360	28,267	17,489	5,033	33,325	32,724
Myton	13,561	5,027	4,098	3,253	1,183	7,073	5,122
Newington	8,940	2,711	3,188	2,052	989	4,652	3,358
St Andrew's	6,572	2,332	1,738	1,993	509	3,721	2,320
Area: Riverside	39,749	13,016	13,552	9,639	3,542	20,294	15,489
Boothferry	9,879	3,261	3,893	1,995	730	3,550	5,403
Derringham	9,369	2,598	3,425	2,480	866	4,838	3,343
Pickering	9,279	2,801	3,037	2,497	945	4,713	3,424
Area: West	28,527	8,606	10,239	7,092	2,590	13,330	11,897
Avenue	11,074	4,349	3,866	2,376	483	3,936	5,458
Bricknell	6,794	1,919	2,879	1,535	461	2,297	3,421
Newland	10,280	4,017	3,915	1,838	511	3,244	5,432
Area: Wyke	28,148	10,304	10,677	5,712	1,456	9,398	14,386
West Hull	85,748	28,974	30,071	20,008	6,695	38,105	37,125
HULL	208,443	69,929	75,661	47,792	15,061	90,743	92,434

5.3.3 Trends in prevalence and comparison with England

From the previous surveys, it was estimated that 26.3% of survey responders in 2007 undertook 30 minutes or more of moderate or vigorous physical activity on five or more occasions during the week, increasing to 26.7% in 2011 and 33.5% in 2014 as illustrated in **Figure 8**. The estimate in 2009 was 36.7% but this high prevalence could be due to the way in which the question was asked and the fact that the survey was completed by interview rather than self-completion. The prevalence was 30.3% in England for 2003 which increased to 37.6% in 2012. It is not possible to examine the trends over time in relation to the 2012 recommendations for Hull. However, nationally it is estimated that 59% in 2008, 60% in 2012 and 56% in 2013 fulfilled the 2012 physical activity guidelines, compared to only 41% in Hull for 2014.

Figure 8: Trends in the prevalence of the (2011) national physical activity guidelines and future projections for England, Hull versus England



5.4 Overweight and obesity

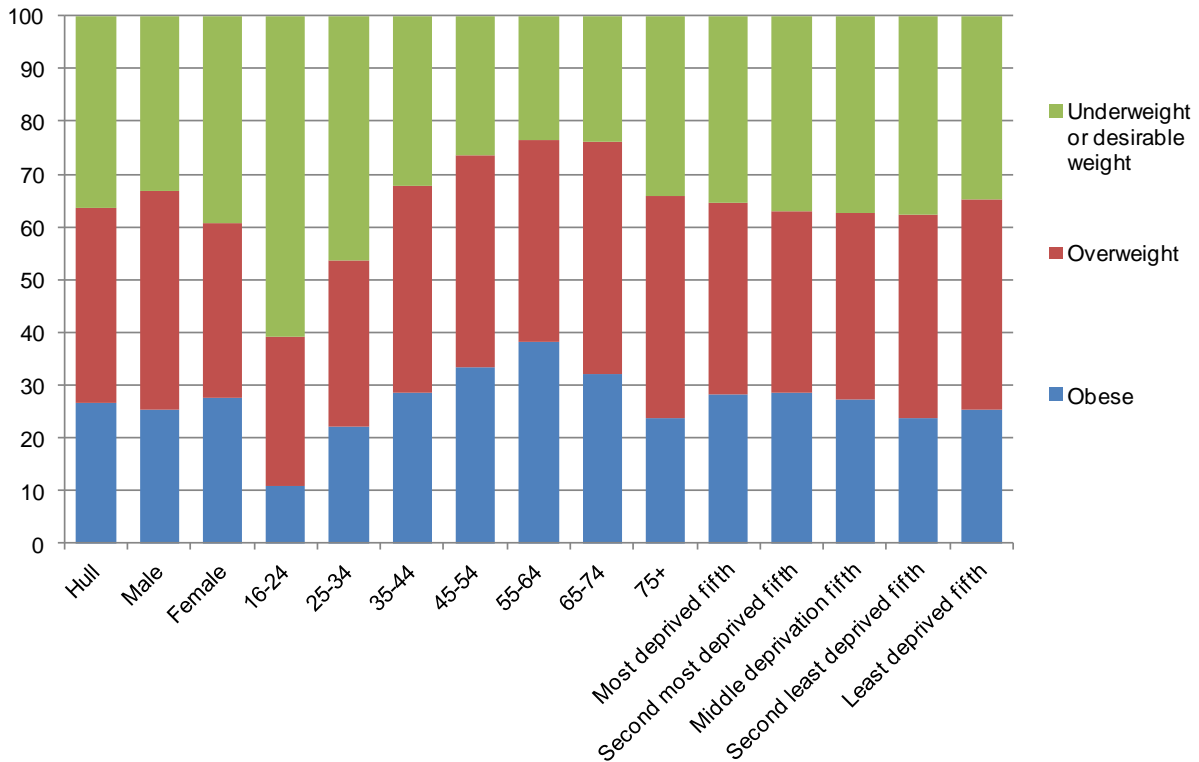
Survey responders were asked their height and weight in either metric or imperial (which were then transformed into metric). As people tend to overestimate their height and underestimate their weight, an adjustment was made to all heights and weights to attempt to compensate for this (as has been done in all previous surveys in Hull). The body mass index (BMI) was calculated by dividing height by the square of weight. A BMI of under 25 was defined as underweight or desirable weight, a BMI of 25 or more but lower than 30 was defined as overweight and a BMI of 30 or more was defined as obese.

5.4.1 Latest prevalence estimate in Hull

Almost two-thirds (63.6%) of the survey responders were overweight (37.1%) or obese (26.5%) as illustrated in **Figure 9**. Whilst more men than women were overweight or obese (66.7% versus 60.8%), slightly more women were obese compared to men (27.5% versus 25.3%). The prevalence of both overweight and obesity increased with age with the highest prevalence among those aged 55-64 years, the prevalence then decreased for the older age groups. The prevalence of overweight and obesity was 39.0% among those aged 16-24 years increasing to 76.5% among those aged 55-64 years, and the prevalence then fell to 65.8% among those aged 75+ years. The equivalent figures for obesity were 10.9%, 38.0% and 23.7% respectively.

The prevalence of overweight and obesity combined differed from 62.2% (second least deprived fifth) to 65.1% (least deprived fifth) across the deprivation fifths. There was no statistically significant difference in the prevalence. The percentage obese was lowest among those living in the second least deprived fifth (23.5%) and least deprived fifth (25.2%) of areas and highest among those living in the second most deprived fifth (28.5%) and most deprived fifth (28.3%) of areas. Whilst this trend is statistically significant, it is not particularly clinically significant as there is not a great deal of difference between a prevalence of 23.5% and 28.5%; obesity is a problem across all areas of Hull regardless of deprivation.

Figure 9: Overweight and obesity, 2014



5.4.2 Prevalence across the wards

Table 5 gives the prevalence of overweight and obesity across the 23 wards in Hull. A range of values (95% confidence intervals – see **footnote 1**) have been given as well as the estimate of the prevalence for each ward. If these ranges do not overlap then the difference in the prevalence estimates will be statistically significant. The total population aged 16+ years as at mid-year 2013 (obtained from official Office for National Statistics data sources) has been used, together with the prevalence, to estimate the total number of people in each ward who are overweight, obese or overweight and obese combined.

Whilst statistically significant, there was not a great deal of difference in the prevalence of obesity by deprivation, and there was no association between overweight and obesity combined across the deprivation fifths. Therefore, the main influential factor in relation to the prevalence of overweight and obesity across the wards will be the age structure of the populations. Wards with generally younger population, such as wards in Newland, Bransholme East, Orchard Park and Greenwood and University tend to have lower prevalence of overweight and obesity. Wards with a generally older population such as Ings, Beverley, Bricknell and Pickering tend to have a higher prevalence of overweight and obesity.

It is estimated that out of the total population of 208,443 aged 16+ years, 132,496 are overweight or obese, with 55,246 of them obese.

Table 5: Prevalence of overweight and obesity and estimated total number of adults who are overweight and obese across the wards in Hull

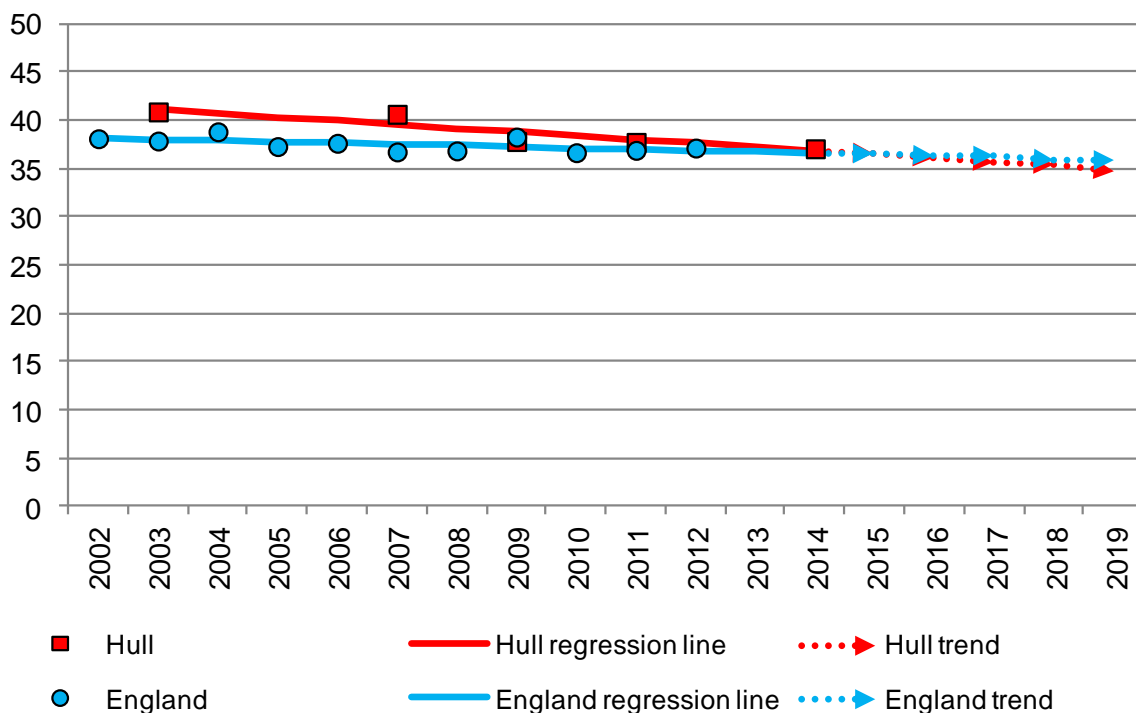
Area	Number of survey responders	Prevalence (%)			Population aged 16+ years	Estimated numbers aged 16+ in ward		
		Overweight	Obese	Overweight or obese		Overweight	Obese	Overweight or obese
Bransholme East	182	37.4 (30.7, 44.6)	28.0 (22.0, 34.9)	65.4 (58.2, 71.9)	7,681	2,870	2,152	5,022
Bransholme West	130	36.9 (29.1, 45.5)	33.1 (25.6, 41.5)	70.0 (61.6, 77.2)	6,423	2,372	2,125	4,496
Kings Park	191	35.1 (28.7, 42.1)	28.8 (22.8, 35.6)	63.9 (56.9, 70.4)	8,637	3,030	2,487	5,517
Area: North Carr	503	36.4 (32.3, 40.7)	29.6 (25.8, 33.8)	66.0 (61.8, 70.0)	22,741	8,274	6,736	15,010
Beverley	160	41.3 (33.9, 49.0)	26.9 (20.6, 34.2)	68.1 (60.6, 74.8)	7,268	2,998	1,953	4,951
Orchard Pk & Grnwd	266	35.7 (30.2, 41.6)	32.3 (27.0, 38.2)	68.0 (62.2, 73.4)	10,141	3,622	3,279	6,900
University	258	27.9 (22.8, 33.7)	21.3 (16.8, 26.7)	49.2 (43.2, 55.3)	8,396	2,343	1,790	4,133
Area: Northern	717	31.0 (27.7, 34.4)	33.2 (29.8, 36.7)	64.2 (60.6, 67.6)	25,805	8,790	6,942	15,732
North Hull	1,187	35.0 (32.4, 37.8)	28.1 (25.6, 30.7)	63.1 (60.3, 65.8)	48,546	17,014	13,619	30,633
Ings	211	40.8 (34.4, 47.5)	27.5 (21.9, 33.9)	68.2 (61.7, 74.2)	9,917	4,042	2,726	6,768
Longhill	206	38.8 (32.4, 45.6)	28.2 (22.5, 34.7)	67.0 (60.3, 73.0)	9,261	3,597	2,607	6,204
Sutton	242	40.9 (34.9, 47.2)	25.2 (20.2, 31.0)	66.1 (59.9, 71.8)	10,172	4,161	2,564	6,725
Area: East	682	28.0 (24.8, 31.5)	35.2 (31.7, 38.8)	63.2 (59.5, 66.7)	29,350	11,802	7,883	19,685
Holderness	237	41.4 (35.3, 47.7)	24.9 (19.8, 30.8)	66.2 (60.0, 72.0)	10,734	4,439	2,672	7,111
Marfleet	212	35.8 (29.7, 42.5)	28.3 (22.7, 34.7)	64.2 (57.5, 70.3)	10,605	3,802	3,001	6,803
Southcoates East	162	40.1 (32.9, 47.8)	26.5 (20.3, 33.8)	66.7 (59.1, 73.5)	6,365	2,554	1,689	4,243
Southcoates West	120	44.2 (35.6, 53.1)	26.7 (19.6, 35.2)	70.8 (62.2, 78.2)	6,419	2,835	1,712	4,547
Area: Park	781	31.4 (28.2, 34.7)	34.2 (30.9, 37.6)	65.6 (62.2, 68.8)	34,123	13,631	9,056	22,686
Drypool	228	36.8 (30.8, 43.3)	27.2 (21.8, 33.3)	64.0 (57.6, 70.0)	10,676	3,933	2,903	6,836
East Hull	1,618	39.6 (37.3, 42.0)	26.8 (24.7, 29.0)	66.4 (64.0, 68.6)	74,149	29,375	19,843	49,219
Myton	287	32.4 (27.3, 38.0)	27.9 (23.0, 33.3)	60.3 (54.5, 65.8)	13,561	4,394	3,780	8,174
Newington	221	31.2 (25.5, 37.6)	33.5 (27.6, 39.9)	64.7 (58.2, 70.7)	8,940	2,791	2,993	5,785
St Andrew's	141	36.9 (29.4, 45.1)	14.2 (9.4, 20.9)	51.1 (42.9, 59.2)	6,572	2,424	932	3,356

Area	Number of survey responders	Prevalence (%)			Population aged 16+ years	Estimated numbers aged 16+ in ward		
		Overweight	Obese	Overweight or obese		Overweight	Obese	Overweight or obese
Area: Riverside	931	27.0 (24.2, 29.9)	29.6 (26.8, 32.7)	56.6 (53.4, 59.8)	39,749	13,507	10,696	24,203
Boothferry	186	38.7 (32.0, 45.9)	24.7 (19.1, 31.4)	63.4 (56.3, 70.0)	9,879	3,824	2,443	6,267
Derringham	223	39.9 (33.7, 46.5)	28.3 (22.7, 34.5)	68.2 (61.8, 73.9)	9,369	3,739	2,647	6,386
Pickering	244	41.0 (35.0, 47.2)	27.0 (21.9, 32.9)	68.0 (61.9, 73.6)	9,279	3,803	2,510	6,313
Area: West	695	29.8 (26.5, 33.3)	38.7 (35.2, 42.4)	68.5 (64.9, 71.8)	28,527	11,402	7,645	19,047
Avenue	259	38.2 (32.5, 44.3)	20.1 (15.7, 25.4)	58.3 (52.2, 64.1)	11,074	4,233	2,223	6,456
Bricknell	161	43.5 (36.1, 51.2)	26.1 (19.9, 33.4)	69.6 (62.1, 76.1)	6,794	2,954	1,772	4,726
Newland	276	28.6 (23.6, 34.2)	23.2 (18.6, 28.5)	51.8 (45.9, 57.6)	10,280	2,942	2,384	5,326
Area: Wyke	724	23.3 (20.4, 26.6)	36.0 (32.6, 39.6)	59.4 (55.8, 62.9)	28,148	10,030	6,390	16,420
West Hull	1,998	36.2 (34.1, 38.3)	25.4 (23.5, 27.3)	61.6 (59.4, 63.7)	85,748	31,029	21,759	52,788
HULL	4,804	37.1 (35.7, 38.4)	26.5 (25.3, 27.8)	63.6 (62.2, 64.9)	208,443	77,249	55,246	132,496

5.4.3 Trends in prevalence and comparison with England

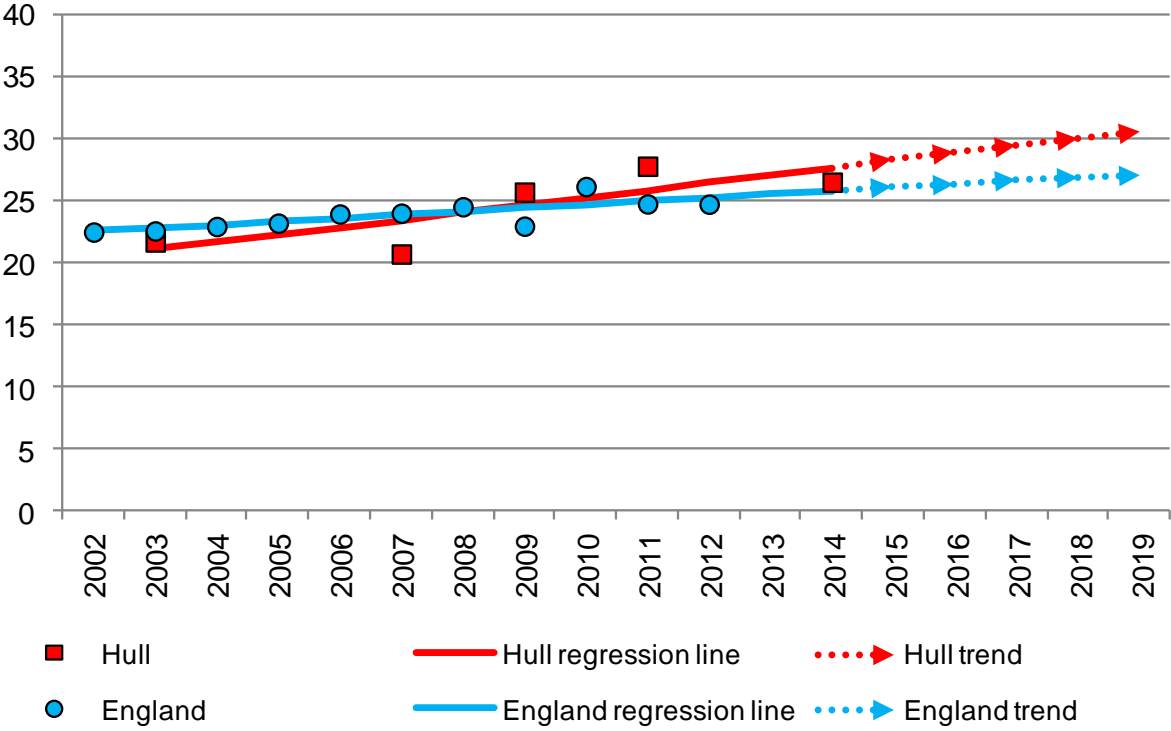
Over the period, percentage overweight only (BMI 25+ but less than 30) has decreased in Hull by -0.39 percentage points per year which is a larger decrease than England (-0.13 percentage points) as illustrated in **Figure 10**. From the local surveys, the prevalence of overweight was 40.9% in 2003 decreasing to 40.6% in 2007, 27.8% in 2009, 37.7% in 2011 and 37.1% in 2011. If the current trend continues then the prevalence is projected to be could be approximately 34.4% by 2020 (35.8% for England). The prevalence in England has also decreased from 37.9% in 2003 to 37.1% in 2012.

Figure 10: Trends in the prevalence of overweight and future projections, Hull versus England



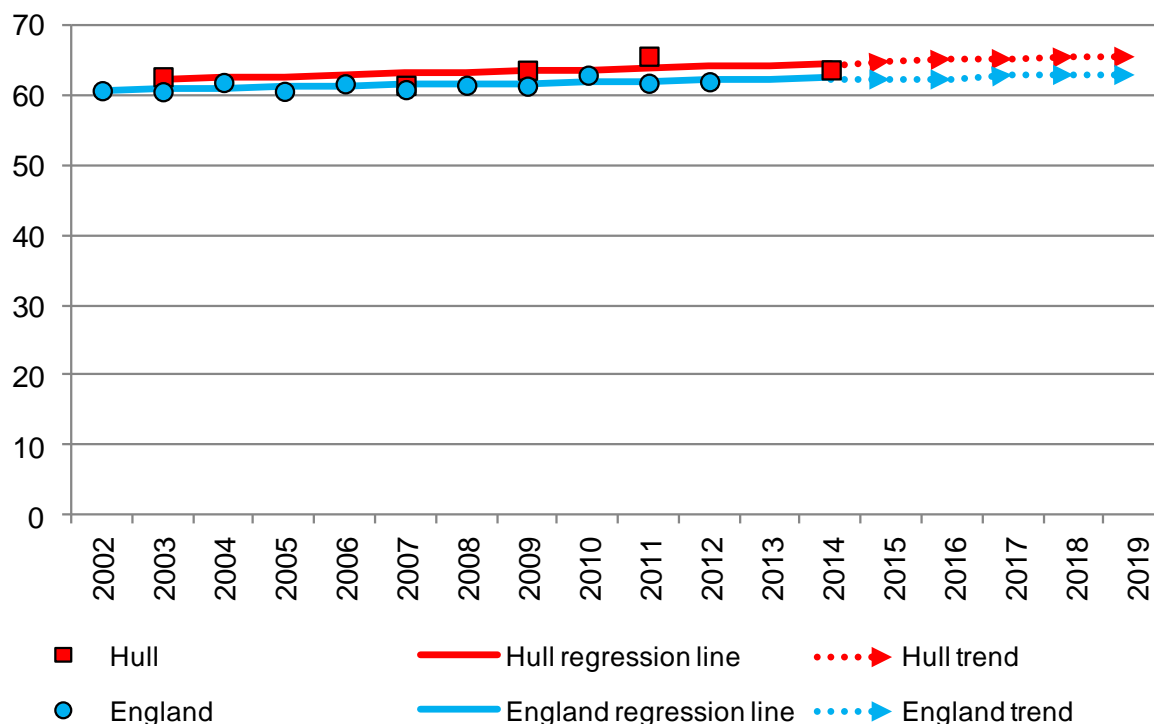
In contrast, over the same period, the prevalence of obesity has increased in Hull by 0.59 percentage points per year which is a larger increase than England (0.27 percentage points) as illustrated in **Figure 11**. From the local surveys, the prevalence was 21.7% in 2003, 20.7% in 2007, 25.7% in 2009, 27.8% in 2011 and 26.5% in 2014. The prevalence in England was 22.5% in 2002 increasing to 24.7% in 2012. If the current trend continues in Hull, then the prevalence is projected to be 31.1% by 2020 (and 27.3% in England).

Figure 11: Trends in the prevalence of obesity and future projections, Hull versus England



In summary, the prevalence of overweight and obesity combined increased in Hull by 0.20 percentage points per year which is a larger increase than England (0.14 percentage points) as illustrated in **Figure 12**. In Hull, the prevalence was 62.6% in 2003, 61.4% in 2007, 63.5% in 2009, 65.5% in 2011 and 63.6% in 2014. In England, the prevalence was 60.6% in 2002 increasing to 61.9% in 2012. If the current trend continues, then it is projected that the prevalence in Hull will be 65.6% by 2020 (63.2% for England).

Figure 12: Trends in the prevalence of overweight and obesity combined and future projections, Hull versus England



5.5 Qualitative research

A number of qualitative research projects have also been undertaken in Hull such as ‘reflector groups’ following the local health and lifestyle surveys. The following gives a flavour of some of the quotes from Hull residents from previous qualitative research regarding diet, physical activity and obesity in relation to:

- **Diet – peer pressure, preference and cost (young people)**
 - *“I eat a lot of chocolate and crisps. I have subway twice a week because it’s near college and I have takeaway a lot.” (16-18 year old)*
 - *“There’s a chippy down the road that’s nice so everyone goes there. It’s miles cheaper than getting a sandwich.” (16-18 year old)*
 - *“Schools have gone all healthy but it just means more people go out for their dinner.” (16-18 year old)*
 - *“We had two canteens. One was a mini McDonalds which kids go to because they like the taste. Even if one person from a group wanted to go to the healthy side they wouldn’t because they want to be with their friends.” (16-18 year old)*
 - *“You feel too much pressure in school and more pressure gets put on you with school work and choosing options. You get stressed out and eat unhealthy food because it makes you feel better.” (11-16 year old)*
 - *“Whenever I have the money I buy chocolate, crisps and Dr. Pepper but then I worry that I’m going to get fat.” (11-16 year old)*

- *“McDonalds have a 99p menu so kids can afford to eat unhealthy food. There’s a chippy across the road as well so most people go there for dinner.” (11-16 year old)*
- *“You eat worse food from after year 8 because you’re allowed out at dinner. When you get to year 10 and 11 you’re allowed out on a night so older kids just get takeaways and beer.” (11-16 year old)*
- *“My lunch isn’t healthy because I just go to the shop.” (11-16 year old)*
- *“I eat less healthy stuff, when I’m with my mates or at school.” (aged 14-15 years)*
- **Diet – parents and eating at home (young people)**
 - *“I live with my mum and she cooks for me. If I was on my own I wouldn’t eat healthily because I can’t cook.” (16-18 year old)*
 - *“I eat crisps but I like fruit and veg. I wouldn’t go out of my way to eat them, when I’m at home if my mum makes me it for tea I’ll eat it.” (16-18 year old)*
 - *“People eat healthier when they’re younger because their parents tell them what to do. When you’re older you’re more independent and make your own choices.” (16-18 year old)*
 - *“My parents have an influence on what I eat and to eat more healthy as they give us the food but then it is our decision as to if we eat that food or not.” (aged 14-15 years)*
 - *“Yes [it’s my decision not to eat fruit or vegetables], my parents do try and encourage me but I just don’t like the smell or taste of them.” (aged 12-13 years)*
 - *“I have to eat what my mum and dad say.” (aged 13-14 years)*
 - *“My mam makes me eat my 5 a day and cooks all my teas but when I’m out with my mates I tend to eat nice food like takeaways and snacks. I just don’t tell me mam.” (aged 12-13 years)*
- **Diet – access and knowledge of parents (young people research – stakeholder interviews)**
 - *“They [the parents] don’t really understand how to cook the foods, we’ll provide recipes every week but it’s then getting them to actually go out there and buy the ingredients as well; they don’t know what half of them are sometimes.” (stakeholder interview in relation to young people and their diets)*
 - *“The parents don’t realise that they’re actually eating the bad foods because they’ll eat it up in their bedrooms and they won’t sit down for a meal with the parents. It’s getting the balance as well some children will do no activities but they’ll eat well or they’ll do lots of activities and the diet is appalling. It’s trying to educate the parents as well as the children.” (stakeholder interview in relation to young people and their diets)*
 - *“I think good food can be expensive and inaccessible, it might not be in the local Spa shop down the road where some of these families buy food from. It’s easier for them to buy a big bag of crisps.”*
- **Diet – concern over future (young people)**
 - *“I don’t need to worry now, I eat whatever I enjoy which is usually junk. When people leave Uni they should start thinking about what they eat because they have the money to buy healthy food.” (16-18 year old)*
 - *“I don’t like salad and healthy stuff, if I die I die.” (16-18 year old)*

- **Diet – weight concerns (young people)**
 - *“Girls don’t eat much at all and if boys are around they won’t eat at all.” (16-18 year old)*
 - *“Girls are more unhealthy than boys because they want to be like Barbie dolls. Most of them think they’re fat when they’re skinny.” (16-18 year old)*
 - *“I read food packets all of the time to see how many calories are in them, I worry about putting on weight all the time.” (16-18 year old)*
 - *“I need to eat a healthy diet because I want to stay slim. I think boys are more impressed when they see skinny girls.” (16-18 year old)*
 - *“Girls are naturally self-conscious but people only look at people who eat too much as unhealthy when it can be worse not to eat enough.” (16-18 year old)*
 - *“I just don’t eat enough. I don’t get hungry. My parents do try and encourage me to eat, they make me shepherd’s pie and things but I don’t eat a lot.” (11-16 year old)*
 - *“I probably wouldn’t worry about my weight if there was no media. My diet normally is to do with the people in the media.” (11-16 year old)*
 - *“I have to think about what I eat because I play sport. If I want to be good at rugby I can’t eat junk all of the time.” (11-16 year old)*

- **Diet – education, children and generational changes (adult reflector groups)**
 - *“One thing that people need to be educated about is portion size because we have completely lost what is a normal portion.”*
 - *“My addiction is food. I was a cook. I do everything from scratch. To me a healthy lifestyle is eating properly and exercise. I’m not very good at exercise. [...] For me, I would say that an addiction is food for me. That’s my problem.”*
 - *“It’s like the magazines, you get the magazines, you open them up, one page it’s showing you how to cook a twelve inch gateaux, on the next page it’s how to lose weight in six days. So a mixture really. I think if you really want to eat healthily, you can. You’ve got to put a lot into it, a lot of thought into it.”*
 - *“I used to do a pack up for the kids. ‘Why can’t I have chocolate bar in my pack up?’ They [other children] take crisps, chocolate. ‘Cause you’re not having them’. [...] To me, a lot of it is peer pressure as well especially with kids; it’s what everyone else eats.”*
 - *“I think a lot of it stems from schools. My daughter is at high school and last year when she started she does cookery and she had to make lasagne. She got mince and onion, and a jar of Dolmio sauce. I haven’t met the cookery teacher yet. I can’t wait to meet her and discuss how they can teach them cooking with jars of sauce.”*
 - *“I live there [near a secondary school] – at dinner time they swarm out, they’re in the takeaways, they’re in Morrisons, they come out with sausage rolls, pies and what have you, everyday.”*
 - *“My kids used to have a cooked meal every night, you know, meat and veg and that, for when my husband got in from work. We’d sit down as a family and have our evening meal together. But now a lot of people they don’t.”*
 - *“[...] when we were brought up, there wasn’t the money, there wasn’t the pre-packed food so if your Mom made a stew or a pie or a rice pudding, you ate that food, you didn’t have a choice at all different things.”*
 - *“In schools they don’t teach about cookery. Isn’t that the issue - that our generation see healthy eating as making it ourselves and growing it ourselves.”*

Turn the clock back to younger people of 20's / 30's and their perception of a cooked meal is putting a pizza in the microwave."

- *"But because I was brought up in that environment where it was the case of 'this is the family meal, you either eat it, or you don't get anything'. And there was never any pudding, there was never any biscuits or crisps in the cupboard, so it just was 'this is your meal, eat it'. And if I didn't then, I didn't, I went without. And because I grew up like that, I don't want my kids to suffer the same."*

- **Diet – takeaways and reasons for eating takeaways (adult reflector groups)**

- *"I was terrible for it, takeaways everywhere. Temptation. I mean, I live across the road from a takeaway and it's lovely and I wish it wasn't there. I'm glad it's there, but I wish it wasn't there."*
- *"It's a much faster pace and people want that – the fast takeaways."*
- *"People don't do it now because they haven't got time, they lead such busy lives. Just go to Asda for a ready meal or you don't even have to go out you can go on the internet and have it delivered."*
- *"Worst thing ever invented ready meals. At least we eat in but it is hard and when you look at things nowadays, the pace of life, the ways things are, it is hard. When you've got kids. Once a week we probably have McDonalds. I don't eat it. But it's like a fashion thing."*
- *"I can agree but I do find a little more inconvenient to prepare a cooked meal because I'm only buying for one. So going off to buy just one apple just gets you looked at weird, or buying a bag of potatoes and using them before they die. It's not always physically possible. So you can't buy in bulk you've got to buy individual portions, and there is a premium on certain items for buying individual portions and there always has been."*
- *"Like my neighbour her kids were sort of brought up on McDonalds and things like that. I often said to her, don't you ever cook a meal for them? No, it's less bother isn't it, just going to McDonalds or order a pizza or something for them."*
- *"If we take into account the time it takes to cook it and the gas and electric, the fuel and footwork to get the store and back and the price of the stuff it works out cheaper to get a takeaway and that should not be right but it can work out like that, there are six of us in the house sometimes and it is cheaper to go across and get the meal deal from the pizza shop, a couple of pizzas and some chips come to about £15 and would feed us all whereas to feed three adults and three children a fresh meal you are talking £10-15 anyway and then you have got all the extra time and effort, so you weigh up the time."*
- *"The elderly who I visit and are involved with do buy ready meals because it's easy. We are alright, we are quite active but the older generation who are not active do eat ready meals."*

- **Diet – food labelling and supermarkets (adult reflector groups)**

- *"I think produce manufactures of food stock, they are under a great pressure from the government to put so much information on labels and you could spend half your life reading the labels before you put them in your basket."*
- *"[Food labelling:] It's a nightmare for people to work out."*
- *"[...] it's too complicated really like you hear about healthy things on the radio and the news it just changes all the time. Remember when brown bread is*

healthier and a year later they are saying white bread is healthy, you just feel like [...] you don't get balance."

- *"Yeah, if the supermarkets put more fruit and veg on offers rather than crisps and chocolate all the time."*
- *"As soon as you walk through the door they've got two aisles, one is always full of crisps, and the other is always full of chocolate, and then you get to the fruit and there's not much choice, and it's usually in poor quality because it's been there all week."*

- **Diet – income (adult reflector groups)**

- *"I get paid every 2 weeks and then once a month I get paid, 'double money' I call it, when I only get paid once a fortnight I go out and only get the bare essentials but when it is the month money I will do a big shop so a lot does depend on how much income you have coming in and how much spare you have got."*
- *"It's the cost of food, cost of living isn't it[...] since I lost my job through injury and I'm having to struggle through on ESA [Employment Support Allowance], we are lucky after paying all the bills and everything to have £20 a week to live on between three of us. [...] We live out of a deep fat fryer at the minute, every meal."*
- *"I think I can make a few improvements, I don't eat healthy all the time but I think a lot of it comes down to budget. I think it is quite difficult eating healthy all the time on a low budget."*

- **Diet – preferences and influence of children's preferences (adult reflector groups)**

- *"[...] fruit and veg don't taste of anything because they are made not for taste."*
- *"I've got a 20-year old, I've got a 17-year old and a 12-year old, all three of them would not touch that [pulses such as lentils or soya beans to reduce their food bills and improve their diet]. Not at all."*

- **Diet – improving diet and effect of poor diet on health (adult reflector groups)**

- *"[...] if you go to France most people work till 6 or 7 o'clock in the evening [...] then they go home and either mum or dad makes dinner [...] and then people eat at 7-8 o'clock in the evening, it is very normal. [People in the UK] say they have a hectic lifestyle, they finish work at 5 o'clock, get home at 6 and stick something in the microwave and then 7 o'clock, plonk themselves in front of the TV."*
- *"I feel healthy now but I don't know when I am 50 years old, I'm worried about diabetes and hypertension that come on at that age, that's why [...] that's what worries me, that's why I am trying to [...] cook healthy food."*
- *"You know it all, but it's just sticking at it."*
- *"My husband had a heart attack and it made us take stock of everything. What we were both eating. Three years ago and since then we have changed our diet a lot. Got rid of all the nice things. Have lots of fish, chicken and turkey. Oily fish he eats."*
- *"When I got ill a few years ago I was intolerant to load of foods. That's when I started paying more attention to what I could eat when I was out and I was finding that most places I went it might look like it's home cooked but a lot of*

the time it's processed. They're just warming it up in the back. It was a lot harder to find places that didn't have all the stuff added in, stuff you don't know about."

- **Physical activity (16-18 year olds)**

- *"There are a lot more things for boys to do, even if girls want to do things they can't. At school they don't have girl's teams and if girls join the boys teams they have to work harder to prove that they can play."*
- *"Girls just want to sit with their mates and bitch. Boys don't care what they look like so they actually enjoy it when they play sports."*
- *"Girls don't want to run around in front of boys in case they look stupid. If the boys couldn't see them they'd probably be less scared of trying things."*
- *"Exercise isn't cool, you end up getting sweaty and that doesn't impress the lads."*
- *"I'd say I was ill then go and stand and smoke."*
- *"I'd just twag or forget my kit every week so I could get out of it."*
- *"I use the pedometer to measure how far I walk every day and I run up and down the stairs when I'm at home."*
- *"I'd go to the gym if it had female only sessions. It's embarrassing when boys are there because they only go to look at the girls."*
- *"I go to the gym but it would be better if you could pay every time you go because some months I don't really have the time."*
- *"I'd go to the gym if it was cheaper. I wouldn't mind paying something though."*

- **Physical activity (11-16 year olds)**

- *"Girls can't be bothered, I don't see the point in running around on a field. I only like PE because we can just sit and watch the boys running round." (11-16 year old)*
- *"Girls are so bitchy in PE, it's better when girls and boys are mixed. As soon as the groups are split up girls can only choose to do dodgeball and kick rounders every lessons." (11-16 year old)*
- *"I prefer not to do PE because of the way I look in my PE kit in front of the boys and other girls." (11-16 year old)*

- **Physical activity (young people research – stakeholder interviews)**

- *"If parents are role models and they're not being active it will influence down into the children and young people."*
- *"We're in the age of computers and cars so children are walking less and cycling less and there's a perception of the street not being safe."*
- *"Kids are now too busy watching TV and using social media to exercise regularly, this is seen as more enjoyable and more of a priority – which is really sad and hard to break."*
- *"There'll always be a cohort that you know when you say "girls we're doing hockey" the response will be "no, we're not doing that" so we offer a wide range of different activities for students."*
- *"We're trying to work on a more social and recreational offer, things that are not as regimented, not as coached, kind of like youth club activities that have a sports element to encourage them to be physically active. They do an array of activities; it's all based on what the young people want to do."*

- *"If you can expose young people to as many different opportunities then they're going to find something they like. Traditionally it was always hockey, football and stuff but schools are getting a lot better."*
- **Physical activity (adult reflector groups)**
 - *"What I do is I walk to the shops instead of going in the car. I take the baby in the pram and carry as much as I can by this way. So you never bring home more than you can carry so save money too."*
 - *"I simply walk around the park."*
 - *"I don't walk, I cycle, I use me bike [...] and that's how I get my exercise, it's just like...like natural [...] it's part of my life. [...] My exercise is part of my life, and I think if you're going to get people to exercise it has to be something that they do naturally, encouraging people to walk to places."*
 - *"For me with my kids we are everyday we put some music on at home and we are just dancing for about one hour or something like that, just trying to move a little bit. Because they are only want to watch cartoons, maybe every day I am putting some music on and trying to move them."*
 - *"The local church does a walking group on a Monday and I joined that recently. They do armchair exercises on a Tuesday. It's really good and more people should do it."*
 - *"My wife and I go to Freedom centre 3 times a week at the Gym. Its £3 per session or £14 per month - no monthly subscription."*
 - *"I started off doing this coach programme where it's an app that you can buy for your phone and it coaches you from not doing any running because I used to love running. I used to run 6 miles every other day. I loved it. It builds you up from walking a minute to jogging a minute."*
 - *"[Keen to exercise to] ... just get rid of the rolls of fat all over."*
 - *"I only exercise at home at the moment 'cos I don't go to any exercise classes [...] I find it more and more difficult to find the class that's right for me."*
 - *"From my point of view, exercising more, it does become a little bit more difficult as you get older, I've now got arthritis...[...] And my body protests so your body can't do it as you used to."*
 - *"What exercise you do depends on your age."*
 - *"I love walking but have had my hip done but I do what I can. I do chair exercises."*
 - *"Yes in a gym I was but I paid too much and it was £38 a month and I had a baby and it was hard for me because my husband works all the time, in the daytime and I need to go in the afternoon when he comes back, so I didn't go has much often as I wanted to, that's why I quit."*
 - *"...a lot of kids don't go out to play like they used to."*
 - *"[...] I sit in front of a screen 10, 11 hours a day."*
 - *"Ain't got the time. I'm tired, drained after work. I don't even clean up at home if he (husband) would not do it, it wouldn't get done."*

6 FURTHER INFORMATION

More detailed information will be available in the main Prevalence Survey 2014 report which is due to be finalised early Summer 2015. Further information is available around diet, physical activity, and overweight and obesity from previous surveys and reports produced by the Public Health Sciences team. The key reports as follows which are (or will be) available at www.hullpublichealth.org:

- Joint Strategic Needs Assessment (JSNA) Toolkit: Exercise report
- JSNA Toolkit: Diet report
- JSNA Toolkit: Overweight and Obesity report
- Prevalence Survey 2014 main report
- Local analysis of Public Health Outcomes Framework indicators
- Hull's JSNA Atlas
- Child obesity reports (National Child Measurement Programme)
- Adult Health and Lifestyle Survey 2011-12 main report
- Adult Health and Lifestyle Survey 2011-12 Reflector report
- Diet and Physical Activity report 2013
- Obesity and Overweight report 2013
- Obesity and Exercise report 2007
- Young People Health and Lifestyle Survey 2012 main report
- Young People Health and Lifestyle Survey 2012 Reflector report
- Health and Lifestyle Survey 2009 Veterans report
- Attitudes to Health Survey 2007

The JSNA Toolkit reports provide a summary of all the information available locally. The survey reports provide detailed information on the prevalence of these risk factors and the reflector reports on the opinions and attitudes towards these factors. The Obesity and Exercise Report 2007 provides information on which factors predict obesity and physical activity levels. Both the 2013 reports include a summary of the prevalence among both young people and adults.

7 REFERENCES

1. Allender, S., et al., *The burden of physical activity-related ill health in the UK*. Journal of Epidemiology and Community Health, 2007. **61**(4): p. 344-348.
2. Scarborough, P., et al., *The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK: an update to the 2006-07 NHS costs*. Journal of Public Health (Oxford), 2011. **33**(4): p. 527-535.