

## **University of Huddersfield Repository**

Bareham, Alison, McCluskey, Serena, Stephenson, John and Topping, Annie

Healthy Halifax Lifestyle Survey

## **Original Citation**

Bareham, Alison, McCluskey, Serena, Stephenson, John and Topping, Annie (2012) Healthy Halifax Lifestyle Survey. Research Report. University of Huddersfield, Huddersfield, UK.

This version is available at http://eprints.hud.ac.uk/id/eprint/14941/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

http://eprints.hud.ac.uk/









## Contents

	Pages
Acknowledgements	4
Executive Summary	5
Background	6
Survey Design	7-9
Survey Distribution	10
Data Analysis	11
Results	12

1.	Resp	oondent Characteristics	12
	1.1	Ward response	12
	1.2	Gender	12
	1.3	Age	13
	1.4	Ethnicity	14
	1.5	Household income	15
		Key Points – Respondent Characteristics	16
	1.6	Body Mass Index (BMI)	17-18
		Key Points – BMI	18
	1.7	Disability, Sexual Orientation and Religion Key Points – Disability, Sexual Orientation	19
		and Religion	19
2.	Heall	thy Foundations segmentation profile	20
	2.1	Respondent segmentation 2.1.1 Gender 2.1.2 Ethnicity 2.1.3 Age 2.1.4 Household income 2.1.5 BMI 2.1.6 Deprivation Key Points – Segmentation Profile	20-21 21-22 22 22-23 23 24 24-25 25
3.	Diet		26
	3.1 3.2	Consumption of fruit and vegetables Consumption of meals prepared and	26
	3.3 3.4	cooked from basic ingredients The importance of healthy eating Confidence in healthy eating	26 27 27-28

	3.5 3.6	Enjoyment of healthy food Purchasing healthy food Key Points – Diet	28-29 30 30
4.	Alcoh	nol	31
	4.1	Alcohol consumption in the last 7 days Key Points – Alcohol	31 31
5.	Smok	ting	32
	5.1 5.2 5.3 5.4 5.5	Smoking prevalence Smoking frequency Smoking locations Purchase of cigarettes/tobacco products Intention to quit Key Points – Smoking	32 32 32 33 33 33
6.	Physi	cal Activity	34
	6.1 6.2 6.3 6.4 6.5	Activity level Sedentary behaviour Activity in employment Enjoyment of physical activity Barriers to engaging in physical activity Key Points – Physical Activity	34 35 35 36 36 36
7.	Comr	nunity Cohesion	37
	7.1 7.2 7.3	Community participation Perceptions of community Neighbourhood support Key Points – Community Cohesion	37 37-39 40 40
8.	Comr	nunity Assets for Health & Wellbeing	41
	8.1 8.2 8.3 8.4 8.5	Places of worship Green space Family & friends Local facilities/initiatives Asset barriers Key Points – Community Assets	41 41 41 42 42 43

Conclusions & Recommendations	44-45
References	46-48
Appendix	49-67



## Authors

Alison Bareham Dr Serena McCluskey Dr John Stephenson Professor Annie Topping

## Acknowledgements

The work described in this report was commissioned by NHS Calderdale in collaboration with Calderdale Council for 'Healthy Halifax', part of the nationwide Community Challenge Fund, funded by the Department of Health. We would like to thank all those individuals who gave their time and assistance with data collection, and we are particularly grateful to Paul Butcher (NHS Calderdale), Jane Sunter (NHS Calderdale), Aimee Haggas (NHS Calderdale), Pete Phillips, Craig Chew Moulding (Calderdale Council), Jo Richmond and team at Park Community Initiative (Calderdale Council), Scott Anderson (Yorkshire and Humber Public Health Observatory), Ruth Southan and Anthony Phillips (Spirul Market Research), Tahreen Iqbal and Shaien Hussein (Community Champions) for their support.

## **Executive Summary**

## Background

For the period 2009 to 2011, NHS Calderdale, in partnership with Calderdale Metropolitan Borough Council, was awarded £2 million for 'Healthy Halifax' as part of the UK government's Healthy Towns Programme. The overall aim of 'Healthy Halifax' was to target initiatives on facilitating healthier lifestyles in local populations living in four Calderdale wards with the greatest health inequalities and poorest health outcomes. As part of understanding 'what works' and how best to meet the health needs of these target populations, a lifestyle survey was undertaken across the four wards.

### Method

The Healthy Halifax lifestyle survey was designed and distributed based on the most up-to-date evidence-based recommendations, and sought to elicit population data on health-related attitudes and behaviours, physical activity, diet, alcohol consumption, smoking, and perceptions of community. Demographic and anthropometric information was also collected.

Surveys were distributed in two phases, March to May 2011 and October to November 2011. A random sample of postcodes from the target wards was generated using a Royal Mail address database, and survey booklets were distributed to all domestic addresses within each randomly selected postcode. The main method of survey distribution was door-to-door, either conducted by a bilingual member of the community to overcome language and/or literacy barriers, or by a trained interviewer familiar with the local area.

The target response rate was 250 completed surveys per ward, and following completion of Phase 1, under-represented groups based on gender, ethnicity and age (working age or retired) were identified by comparison of respondents with ward profile proportions, and a target quota sample was calculated. In Phase 2, target respondents were identified on-street or door-to-door by a market research team, and the surveys were completed using face-to-face Interview methods.

### Results

The Healthy Halifax lifestyle survey sample (n=1339) was found to be representative of the target wards when compared with ward profile demographics. This resulted in an accurate and rich source of health data collected from traditionally under-represented, hard to reach groups. Findings suggest that poor health behaviours constitute predominant social norms within these wards, but differences in health behaviours were observed both within and between the target wards, indicating that generalised area interventions informed by local and national policy may not be accurate (and therefore not effective) as they do not reflect the complexities of individual populations. However, findings also suggest that there is clear potential to invest and build on existing community assets in order to increase social capital and create more sustainable changes in order to reduce health inequalities.

### Conclusions

Findings from the Healthy Halifax lifestyle survey appear to recommend a bottom-up community development approach alongside a top-down commissioner approach to target resources where they are most needed. More detailed, longitudinal research and evaluation within target populations is needed in order to increase knowledge of health behaviours and attitudes in such communities and measure changes over time.

## Background

In 2008, the Government allocated £30 million to the Healthy Community Challenge Fund as part of the Healthy Weight, Healthy Lives strategy [1]. The UK Department of Health funded a series of public health initiatives in nine 'Healthy Towns' and NHS Calderdale, in partnership with Calderdale Metropolitan Borough Council was awarded £2 million for 'Healthy Halifax' over the period of 2009 to 2011. The overall aim of 'Healthy Halifax' was to target initiatives on facilitating healthier lifestyles in local populations living in four Calderdale wards with the greatest health inequalities and poorest health outcomes [10] - Illingworth & Mixenden, Park, Ovenden and Town, highlighted in Figure 1 below:

#### Figure 1: Map of Healthy Halifax target wards.



(Map: Chew Moulding, Calderdale Council, 2012).

As part of understanding 'what works' and how best to meet the health needs of these target populations, a lifestyle survey was undertaken across the four wards. Lifestyle surveys are a mechanism for collecting detailed measures of individual behaviours that impact on health in specific local populations, and have been undertaken locally to inform Calderdale's Joint Strategic Needs Assessments (JSNA) [2,3]. However, the target populations of Healthy Halifax are often under-represented in the response to lifestyle surveys, limiting both the generalisability of any findings and the effectiveness of any services commissioned as a result. Therefore, the Healthy Halifax Lifestyle Survey was designed based on an up-to-date, evidence-informed approach aimed at maximising response rates in under-represented populations [4].

## Survey Design

The Healthy Halifax lifestyle survey was designed and distributed based on the following evidence-based recommendations:

- The use of short, standardised, previously validated questionnaires
- The use of colour, graphics and a covering letter
- Offering an incentive
- Pre-contact through advertising
- Emphasising that the survey originated from a University
- The use of mixed-mode survey distribution (this included door-to-door, on-street, face-to-face within local community settings and electronic methods).

Following consultation with commissioners a survey booklet was constructed made up of a number of relevant, pre-validated instruments. Together, these sought to elicit population data on health-related attitudes and behaviours, physical activity, diet, alcohol consumption, smoking, and perceptions of community. In addition, demographic and anthropometric information was also collected, and a copy of the survey booklet can be found in Appendix A.

The survey comprises the following sections, and a detailed description of the survey instruments used in each section is provided below:

#### Getting to know you

Health-related attitudes and behaviours were measured using the 19 question item allocation model drawn from the Healthy Foundations Life-Stage Segmentation Model Toolkit [5] www.dh.gov.uk/socialmarketingportal. Segmentation is proposed to be a powerful tool that offers insight beyond basic demographic data typically associated with lifestyle surveys. It allows an understanding of population subgroups taking into account psychographic and attitudinal data, providing a more complete picture of the respondent. Knowing that an individual or group of people living in a particular area belong to one of these segments allows local health service providers to tailor interventions and consider the impact of attitudes and beliefs on the potential success of a programme or project.

Health Conscious Realists (HCR) – motivated people who feel in control of their lives and their health.

Balanced Compensators (BC) – positive people who like to look and feel good about themselves. Live for Todays (LFT) – take a short term view of life and believe whatever they do is unlikely to have an impact on their health, so what's the point?

Hedonistic Immortals (HI) – people who want to get the most from life and do not mind taking risks as this is part of leading a full life.

Unconfident Fatalists (UF) – fairly negative about things and don't feel good about themselves. A significant proportion feel depressed. Participants were asked whether they agree or disagree with a range of statements relating to their health and wellbeing, and also to rank ease, control and enjoyment of living a healthy lifestyle on 7-point Likert scales. The derived scores allowed each respondent to be allocated to one of the five following segments:

## Your physical activity

The short version of the International Physical Activity Questionnaire (IPAQ) [6] was used to gather information about respondents' physical activity over the previous seven days. Respondents were asked to report the amount of time that they spent sitting (ranging from less than five hours to over 13 hours) and walking (ranging from less than 20 minutes to over an hour) and on how many days they did moderate physical activity (e.g. gardening, steady cycling or aerobics) or vigorous physical activity (e.g. running or jogging, playing squash, heavy lifting and playing football), and for how long.

Respondents were also asked to choose a statement which best described the level of physical activity involved in their work, and to rate their feelings about physical activity on a 7-point Likert scale (1 = I wish I didn't have to do physical activity, but I know it's important for my health; to 7 = As well as being important for my health, physical activity is something I enjoy). Responses were scored as low, moderate and high physical activity.

In order to gain insight into possible barriers to engaging in regular physical activity, respondents were also asked to select from a list of 13 reasons why they might find it difficult to participate in physical activity and also which local facilities they have, or would consider using, in order to participate in physical activity or organised exercise. The responses to each statement were scored as yes or no. This information was used to gain an overall picture of the barriers involved in using or accessing existing community facilities.

### Your eating habits

Adapted from the Altogether Better Survey [7], questions were used to provide information on the number of respondents achieving the Department of Health (DH) recommended target of five portions of fruit and vegetables per day [8], and how many times per week food was prepared and cooked from basic ingredients. Respondents were also asked to rank the importance of five factors associated with food and eating habits (e.g. eating a healthy diet), to rate their confidence about healthy food purchase and preparation on Likert scales (1 = no confidence; to 7 = very confident), and whether they agreed or disagreed with three statements relating to level of enjoyment associated with preparing, choosing and eating healthy foods (e.g. I enjoy putting effort and care into the food I eat).

### Alchohol

Questions recommended by the Yorkshire and the Humber Public Health Observatory (YHPHO) were used for this section [9]. Respondents were asked whether they drank alcohol, and if so, what type (e.g. beer, wine or spirits) and recall how much they consumed each day in the last seven days. Responses were calculated as units of alcohol. Current DH guidelines recommend the maximum daily amount for women is two to three units of alcohol, and three to four units for men [10].

### Smoking

Questions compiled by the Tobacco Control Research Bulletin were used for this section in order to enable comparison with national data [11]. Data were collected on whether respondents had ever smoked or used tobacco products, and/or were a current smoker or user of tobacco products. Those respondents who currently smoked or used tobacco products were asked how often (e.g. daily). Respondents were also asked whether they had thought about giving up and if so, when (within a 12 week period). Intention to quit is perceived as prerequisite for successful smoking cessation, therefore measuring intentionality within the population could indicate where best to target interventions [12-15]. Specific questions requested by NHS Calderdale were also included in order to gain some insight on smoking in the home and how this could contribute to passive smoking, and relating to the purchase of tobacco products.

### About you

Demographic information was also collected from each respondent. This included gender, height and weight (in order to allow for calculation of Body Mass Index [BMI]), age group (ranging from 18 years to 75 years and over), ethnicity, postcode, annual household income, a statement of disability, religion and beliefs, and sexual orientation.

## You and your community

Questions relating to perceptions of the community and community participation were adapted from the Altogether Better Survey [7]. Respondents were asked how often they attended, took part in or helped with activities organised in their local area, ranging from at least once a week to never. Respondents were also asked how strongly they felt that they belonged to their immediate neighbourhood, ranging from very strongly to not strongly at all, and how much they agreed with certain statements about their community (e.g. there are people in my life who really care about me), ranging from strongly disagree to strongly agree. Respondents were also asked whether they felt able to call on others for help, and overall, how satisfied they were with their neighbourhood as a place to live, ranging from extremely dissatisfied to extremely satisfied.

An open-ended question was also developed and included at the end of this section, inviting respondents to indicate what or who in their communities contributed to their general health and wellbeing. The background to this question came from 'the asset approach' [16] which values the capacity, skills, knowledge, connections and potential in a community, rather than focusing on the problems, needs and deficiencies. Among other aims, the asset approach promotes building social capital, high levels of which are correlated with positive health outcomes, well-being and resilience [17]. The aim of using the asset approach is to inform new kinds of community-based working and to refocus existing council and health service programmes.

## Prize draw

Once surveys had been completed, respondents were invited to enter into a prize draw, providing a contact telephone number for their chance to win a Nintendo Wii Fit. Only completed surveys were entered into the prize draw, and the winner was chosen at random.

## Survey Distribution

Surveys were distributed in two phases, March to May 2011 and October to November 2011.

## Phase 1

## Sample

A random sample of postcodes from the target wards was generated using a Royal Mail address database. The target response rate was 250 completed surveys per ward.

## Method

Survey booklets were distributed to all domestic addresses within each randomly selected postcode. The main method of survey distribution was door-to-door, either conducted by a bilingual member of the community to overcome language or literacy barriers, or by a trained interviewer familiar with the local area. This included members of The British Muslim Association (BMA), Community Health Champions and students of the University of Huddersfield who were resident in the target wards. Each member of the survey distribution team was allocated a set of the sample postcodes and issued with maps of the area. Surveys were distributed to residents aged 18 years and over within each household. Information about the survey and instructions for completion were read from a scripted sheet, and a time to collect completed surveys was arranged. Survey distributors were not involved with questionnaire completion, but contact details were provided in case of any queries.

If residents were not at the household when survey distributors called to collect their completed survey, another copy of the survey, along with a reminder postcard was delivered. The postcard provided information about different survey return options, including local drop boxes, pre-paid postal return or a web address to access an electronic version of the survey. In addition to households, survey distributors also approached residents at local community venues within the target postcode areas, including religious settings, community support networks, local visitor attractions, supermarkets and GP surgeries.

An email with a link to the electronic version of the survey was distributed via Calderdale e-call (Calderdale Council weekly internal staff email) and detailed in the Friday Flyer, a weekly roundup of events and news about Halifax North and East. The online lifestyle survey was advertised in Calderdale Call (a magazine produced by NHS Calderdale and Calderdale Council about local services) in September 2010 providing the electronic link to complete the lifestyle survey and alternative directions to complete the paper lifestyle survey at Change 4 Life shop in Halifax town centre [18].

## Phase 2

## Sample

Following completion of Phase 1, under-represented groups based on gender, ethnicity and age (working age or retired) were identified by comparison of respondents with ward profile proportions [19], and a target quota sample was calculated.

## Method

Target respondents were identified on-street or door-to-door by a market research team. The surveys were completed using face-to-face interview methods.

## Data Analysis

Respondents were allocated to Park, Town, Ovenden or Illingworth & Mixenden wards based on postcode information, and surveys without a valid postcode (either incomplete or not from the target areas) were excluded from data analysis (n=94). Statistical analysis was predominantly descriptive as the majority of questions in the lifestyle survey elicited categorical responses, for example low, moderate or high activity. Responses were stratified by ward and analysed by frequency and/or percentage where appropriate.

The Healthy Foundations segmentation profile was compared with corresponding national estimates for the most deprived quintile, using one-sample chi-squared tests for association. The age and gender distributions across each segment were also compared against corresponding national proportions, and the significance of any difference between sample and national proportions was assessed inferentially.

All analyses were based on valid responses to the relevant questions only. In general, inclusion of a respondent in a particular analysis required submission of both a valid postcode plus a valid response to the question under investigation. Hence the numbers of respondents included in each analysis varied.

## Results

## 1. Respondent Characteristics

## 1.1 Ward response

The proportion of adult residents who responded to the survey in each ward can be seen in Figure 1.1 below. The adult populations for each target ward were estimated using age information found in existing ward profiles [19]. The actual population numbers were broadly similar across all four target wards, but it can be seen that there was an over-representation of respondents from Park ward. However, the respondents in each ward are representative of ward demographics in terms of gender, ethnicity and age. The total number of surveys received was 1433, but analyses could only be performed on those surveys with a completed valid postcode belonging to the target wards (n=1339).

#### Figure 1.1: Number and percentage of respondents by ward.

Ward	Estimated adult population (n)	Total survey response rate (n)	Proportion of adult population (%)	Proportion of valid responses (%)
Town	9,534	270	2.83	20.2
Park	9,936	545	5.49	40.7
Illingworth & Mixenden	10,188	258	2.53	19.3
Ovenden	9,058	266	2.94	19.9
No postcode/outside target area	-	94	-	-
Total	38,716	1433	3.45	1339

## 1.2 Gender

Gender was recorded for 95.4% (n=1277) of the total number of respondents across the four wards, and the percentages of males and females are comparable with ward profile figures (see Figure 1.2).

### Figure 1.2: Gender profile by ward.

Ward	Men	Women	Total
Town	161 (60.3%)	106 (39.7%)	267
Park	248 (48.9%)	259 (51.1%)	507
Illingworth & Mixenden	128 (51.6%)	120 (48.4%)	248
Ovenden	125 (49.0%)	130 (51.1%)	255
Total	662 (51.8%)	615 (48.2%)	1277

## 1.3 Age

The lifestyle survey targeted adults only (18 years and over), therefore direct comparison with ward profiles was difficult as different age categories are used. These are: 0-4, 5-14, 15-24, 25-44, 45-59, 60-74 and 75+ years. In particular, comparison with the 15-24 years age group in the ward profile was problematic as this includes a younger age group who were not included in the lifestyle survey. It was estimated that this group comprised 70% adults (since 3 out of the 10 years represented were children). Likewise the 60-74 age group includes 5 years of working ages and 10 years of non-working ages, so it was estimated that the 60-74 age group comprised two-thirds of retirees.

Therefore, ward profiles were used to estimate the proportion of adults in the ward who were of working age. These were estimated to be Town 78.3%; Park, 85.6%, Illingworth & Mixenden 80.0%, Ovenden 82.3%. By comparison, the proportions of working age adults in the lifestyle survey sample are Town 82.8%, Park 86.7%, Illingworth & Mixenden 83.6%, indicating that the age of respondents in each ward is representative compared with ward profiles.

The age profiles of respondents (n=1318) across the four wards are summarised in figures 1.3a & 1.3b below.

Ward	Age group							
	18-24	25-34	35-44	45-54	55-65	65-74	75+	Total
Town	30 (11.1%)	48 (17.8%)	44 (16.3%)	62 (23.0%)	40 (14.8%)	35 (13.0%)	11 (4.1%)	270
Park	76 (14.4%)	132 (25.0%)	107 (20.3%)	77 (14.6%)	66 (12.5%)	48 (9.1%)	22 (4.2%)	528
Illingworth & Mixenden	33 (12.9%)	39 (15.2%)	64 (25.0%)	47 (18.4%)	31 (12.1%)	31 (12.1%)	11 (4.3%)	256
Ovenden	38 (14.4%)	44 (16.7%)	46 (17.4%)	50 (18.9%)	39 (14.8%)	39 (14.8%)	8 (3.0%)	264
Totals	177 (13.4%)	263 (20.0%)	261 (19.8%)	236 (17.9%)	176 (13.4%)	153 (11.6%)	52 (3.9%)	1318

#### Figure 1.3a: Age profile across wards.

### Figure 1.3b: Age profile by ward.



## 1.4 Ethnicity

This questionnaire comprised of twenty ethnic categories, including the options of any other ethnic group and not stated. However, over 90% of respondents who stated their ethnicity classified themselves as either White British (n=1035) or Asian Pakistani (n=294). The only other category indicated by more than ten responses was White Irish (n=20).

Therefore, responses were condensed into White (including White British, White Irish and Other White Background), Asian (including Asian or Asian British Indian, Asian or Asian British Pakistani, Asian or Asian British Bangladeshi, and Any other Asian background) and Other (any other categorisation). Some categories, including Mixed White and Black Caribbean, Chinese and Gypsy/Traveller/Roma, were not recorded by any survey respondents.

The ethnic composition of the survey respondents is comparable to that described in ward profiles; that is, the samples of respondents from Town, Illingworth & Mixenden and Ovenden wards were mainly White, whereas the sample from Park ward was mainly Asian – see figures 1.4a and 1.4b below.

Ward	White	Asian	Other	Total
Town	263 (97.4%)	4 (1.5%)	3 (1.1%)	270
Park	247 (45.6%)	285 (52.7%)	9 (1.7%)	541
Illingworth & Mixenden	244 (93.5%)	11 (5.6%)	0 (0.0%)	255
Ovenden	257 (97.8%)	4 (1.5%)	2 (0.8%)	263
Total	1011	304	14	1329

### Figure 1.4a: Ethnicity profile by ward

### Figure 1.4b: Ethnicity profile by ward



## 1.5 Household income

About one third of all respondents (n=471) provided information about their household income, with the majority reporting an income of less than £20,000 per year. Less than 5% of respondents reported an income above £40,000. Response rates to this question were highest in Park ward (218 out of 545; 40.0% response rate) and lowest in Town ward (70 out of 270; 25.9% response rate).

The modal income category in Park ward was  $\pm 10,000 - \pm 19,999$ , whereas the modal income bracket in all other wards was up to  $\pm 10,000$ . Park ward respondents also recorded a slightly higher proportion of higher household income ( $\pm 30,001$ +) than was found in other wards (see figures 1.5a & 1.5b). However, ward profiles indicate lower proportions of ward populations with an income below  $\pm 10,000$  compared with the lifestyle survey data, and given the low response rate to this question, the household income of respondents is not likely to be representative of the target wards.

Ward	Less than £10,000	£10,001- £20,000	£20,001- £30,000	£30,001- £40,000	£40,001- £50,000	£50,001- £60,000	£60,001+	Total
Town	24 (34.2%)	26 (37.1%)	7 (10.0%)	5 (7.1%)	7 (10.0%)	0 (0.0%)	1 (1.4%)	70
Park	60 (27.3%)	76 (34.8%)	57 (26.1%)	18 (8.3%)	6 (2.8%)	0 (0.0%)	1 (0.5%)	218
Illingworth & Mixenden	29 (33.8%)	22 (25.6%)	14 (16.3%)	19 (22.1%)	1 (1.2%)	0 (0.0%)	1 (1.2%)	86
Ovenden	35 (36.1%)	36 (37.1%)	14 (14.4%)	7 (7.2%)	3 (3.1%)	2 (2.1%)	0 (0.0%)	97
Totals	148 (31.4%)	160 (34.0%)	92 (19.5%)	49 (10.4%)	17 (3.6%)	2 (0.4%)	3 (0.6%)	471

## Figure 1.5a: Household income by ward.

### Figure 1.5b: Household income by ward



#### Key points: Respondent characteristics

- The Healthy Halifax lifestyle survey data is representative of the target wards in relation to gender, ethnicity and age, and because the target areas were some of the most deprived with the poorest health outcomes, this means that a rich source of health data from traditionally under-represented, hard to reach groups has been collected [20-23].
- Different modes of survey administration may be more appropriate for certain kinds of questions in certain populations. For example, the household income question had a significantly lower response rate than for other questions in this section. Information about household income is considered by many as sensitive, particularly in areas with low income. The highest response rate to this question came from those surveys completed online (85%), suggesting that people are more likely to respond to sensitive questions via an anonymous method.
- However, online surveys also yielded the greatest number of non-valid responses (i.e. no postcode completed or postcode outside the target area) 20% compared with 5.5% of surveys completed via all other methods. This could indicate that the anonymity of online surveys was inhibiting postcode disclosure, and that targeting of specific areas was not as easily controlled compared with other methods.
- Despite using an evidence-informed approach to survey administration in order to maximise response rates (i.e. door-to-door using local contacts), it was found that this method resulted in a low to moderate response in the first phase of data collection. One possible explanation for this was that phase one of the survey coincided with the 2011 Census [24], resulting in survey fatigue [25]. Furthermore, communities with higher levels of inequality are frequently targeted for information, feedback and surveys often with diminishing returns, and it is likely that these wards have been targeted by previous research, interventions and evaluations due to high unemployment and deprivation, and the local and national focus on reducing health inequalities and building communities [24, 26-32].
- Another evidence-informed strategy was more successful the use of bilingual survey distributors appeared to facilitate a positive response in the Asian communities and helped overcome any language barriers to survey completion.
- In order to boost response rate and yield a more representative sample, a quota sample was devised for
  Phase 2 to target under-represented groups and ensure as close a match as possible to ward profiles in
  terms of ethnicity, gender and age. Survey administration was conducted by a market research team via
  on-street and door-to-door methods, with the surveys being completed by a member of the market
  research team. This approach yielded the target response rate and ultimately a representative sample.

## 1.6 Body mass index (BMI)

Respondents were asked to report their height and weight (n=1235), from which Body Mass Index (BMI) could be calculated, using the expression BMI =  $W/H^2$ , where W is weight in kilogrammes and H is height in metres. The distribution of the BMI scores across each ward is shown in Figures 1.6a-1.6d.



## Figure 1.6a : Distribution of BMI scores: Town ward

Figure 1.6c: Distribution of BMI scores: Illingworth & Mixenden ward



#### Figure 1.6b: Distribution of BMI scores: Park ward



Figure 1.6d: Distribution of BMI scores: Ovenden ward



The highest mean BMI of 27.1 was recorded in Illingworth & Mixenden (95% confidence interval 26.3-27.9), with Town and Ovenden wards both recording a mean BMI of 26.6. The 95% confidence interval for Town was 26.0–27.2; and 25.9–27.2 for Ovenden. The lowest mean BMI of 25.6 was recorded in Park ward, with a 95% confidence interval of 25.2-26.1. It should be noted that an individual BMI of 64.2 was calculated in Illingworth & Mixenden, and this outlying value would have increased the mean BMI for this ward. However, it was found that the proportions of respondents sampled with a BMI over 25 within Illingworth & Mixenden and Ovenden wards were broadly similar to the national figures cited in the Health Survey for England 2009, with 66% of men and 57% of women in the overweight or obese categories [33].

The proportion of respondents considered to be overweight (those with a BMI of 25.0 or higher) was lower in Park ward (236 out of 545; 43.3%: 95% confidence interval 39.1% - 47.5%) than in other wards. Over half of respondents in Town (151 out of 270; 55.9%: 95% confidence interval 50.0% - 61.8%) Illingworth and Mixenden (152 out of 258; 58.9%: 95% confidence interval 52.8% - 65.0%) and Ovenden (147 out of 266; 55.3%: 95% confidence interval 49.3% - 61.3%) were classified as overweight. Therefore the proportion of overweight respondents (43.3%) in Park ward is lower than the national average.

The proportion of respondents considered to be obese (those with a BMI of 30.0 or higher) was also lower in Park ward (81 out of 545; 14.9%: 95% confidence interval 11.9% - 17.9%) than in other wards. The corresponding proportions in Town, Illingworth & Mixenden and Ovenden wards were 62 out of 270 (23.0%: 95% confidence interval 18.0% - 28.0%), 64 out of 258 (24.8%: 95% confidence interval 19.5% - 30.1%) and 59 out of 266 (22.2%: 95% confidence interval 17.2% - 27.2%). BMI data reported in Calderdale JSNA 2011 indicates that obesity rates in the lifestyle survey sample are comparable with the regional average of 24.2% [2], and also the national obesity average reported in the Healthy Survey for England 2009 [14]. However, Park ward has a significantly lower rate of obesity (14.9%) compared with regional and national figures.

It was also found that the mean BMI for white respondents (26.5) was higher than the mean BMI for Asian respondents (25), and an independent samples t-test found this difference was statistically significant ( $t^{1268}$  = 2.60; p=0.009).

### Key points: BMI

- Findings in three of the target wards highlight concerns about childhood obesity due to the influence of obesogenic household environments [27], and obesity becoming a social norm as recent research suggests people are more likely to be obese if they know someone obese [34, 35]. Interventions aimed at reducing obesity may need to target households specifically and address issues around social norm behaviour.
- Further investigation into the relatively low obesity rates in Park ward may be helpful in order to inform the design of interventions aimed at reducing obesity. Alternatively, it may be that the true picture of obesity in Park ward may be under-represented as it has been shown that people who know they are overweight do not disclose their accurate weight [36]. It may therefore be useful to lower the threshold of obesity during statistical analysis to allow for self-report bias [37].
- The requirement to provide both height and weight in order to calculate BMI meant that the response rate was slightly lower to this question compared with other single-item response questions. More simple measures of obesity may need to be considered in order to maximise response rates.
- The door-to-door method of survey administration yielded the greatest response rate to this question (96%), followed by the online method (74%), with all other delivery modes having a combined response rate of (81%).
- Asian respondents had a statistically significantly lower mean BMI than White respondents, and further investigation into the links between ethnicity and obesity may be illuminating. However, both means were over 25 and therefore classified in the overweight category, and it should be acknowledged that ethnicity is linked to different physical responses to fat storage and body shape, and the risks for coronary heart disease and stroke are higher for the Asian population at a lower BMI as they are likely to carry more fat than the general population at the same BMI [38]. These findings support the suggestion that more appropriate measures of obesity should be used in different population groups, and weight management interventions should be tailored accordingly.

## 1.7 Disability, sexual orientation and religion

A small number of respondents from all wards reported having a disability (n=164). The ward with the greatest proportion of respondents with a disability was Illingworth & Mixenden, at 16.7% (95% confidence interval 12.1% - 21.3%). Corresponding proportions in other wards were 12.7% in Ovenden (95% confidence interval 8.6% - 16.8%), 11.9% in Park (95% confidence interval 8.1% - 14.7%) and 10.5% in Town (95% confidence interval 6.4% - 15.0%), and in all wards the type of disability most often reported was physical disability. The questionnaire also included a long-term illness option, but compared with ward profiles, the lifestyle survey had significantly fewer respondents reporting a long-term illness so meaningful comparisons could not be made. Ward profiles do not provide a figure for disability.

Of those who reported their sexual orientation (n=1251), the majority described themselves as heterosexual in all wards. Frequencies of other categories in other wards were negligible.

Of those respondents who reported their religion (n=968), the majority in Town, Illingworth & Mixenden and Ovenden wards reported this to be Christianity, with proportions varying from 89.2% in Illingworth & Mixenden (95% confidence interval 84.4% - 94.0%) to 96.0% in Town (95% confidence interval 93.1% - 98.9%). The majority of respondents in Park ward reported their religion to be Islam (61.2%: 95% confidence interval 56.7% - 65.7%), with Christianity reported by 38.3% of respondents. Frequencies of all other religion categories were negligible. These proportions are slightly higher compared with data cited in Calderdale JSNA 2011, which indicates a 71.6% Christian population in Ovenden ward, 75.1% Christian population in Illingworth & Mixenden, 71.8% Christian population in Town, and 51.7% Muslim population in Park ward [2].

## Key points: Disability, sexual orientation and religion

- The prevalence of long-term illness identified in ward profiles was not found in the lifestyle survey sample. This may have been due to the terminology and definitions of a long term illness, which often includes the health conditions associated with obesity such as type 2 diabetes, hypertension, dislipedaemia, coronary heart disease, cancer, liver and gall bladder diseases. Someone experiencing these conditions may not associate them with the expression long term illness or consider themselves as having a disability. The expression assumes an understanding of the diagnostic labelling applied to a cluster of symptoms, and that individuals have sufficient health literacy to understand their diagnosis, and/or they have received an adequate explanation of their condition. The target wards for the lifestyle survey are some of the most deprived in the region, and deprivation has been associated with poor health literacy and understanding of health conditions [39]. In addition, there may be language barriers to understanding Western health terminology in some BME populations, and therefore it appears that further work may be required in developing appropriate ill-health questions in order to more accurately examine the links between health conditions and health behaviour in these target populations.
- Low response rates to the other categories of the sexual orientation question indicate that individuals other than those describing themselves as heterosexual did not respond. Due to the sensitive nature of this question, this finding was not surprising, but further work on how best to elicit this information may be required as it has been proposed that some health inequalities in the Calderdale region may be linked to sexuality [2].
- The proportions of Christians and Muslims in the target wards were higher than has been previously reported [2]. This confirms that those groups who are traditionally under-represented in lifestyle surveys are clearly represented in this data, allowing a more robust understanding of the links between ethnicity, religion and health behaviours. This response rate can be attributed to where surveys were distributed, such as faith-linked luncheon clubs, church groups and mosques (with support from the British Muslim Association). This finding indicates the potential of utilising faith communities to maximise survey response rates, and to target health interventions.

## 2. Healthy Foundations Segmentation Programme

The lifestyle survey segmentation profile was compared to the national segmentation profile for England & Wales generated by Healthy Foundations research[40]. Healthy Foundations data, augmented with census data has been used to generate synthetic estimates of segmentation profiles based on demographic information. The target wards are placed in the most deprived quintiles nationally based on the Indices of Multiple Deprivation (IMD) [40, 41], and therefore the lifestyle survey segmentation profile was also compared to synthetic estimations of the segmentation profiles for the most deprived quintiles nationally.

## 2.1 Respondent segmentation

The algorithm for calculating segmentation profiles requires a response to all items in the questionnaire. Therefore, in order to calculate segmentation profile for each ward, only those respondents who completed the whole questionnaire and who reported their postcode were included (n=1264). The profiles for each ward are illustrated below:

	2.1a: Segmer	and the second sec		
FIGUIDE	/ La: Seamer	nrarion n	NCODIA DI	/ ward
riguic	2. 10. JUginur	itution p		vvulu

Ward						Total
	Hedonistic immortals	Live for today	Unconfident fatalists	Health conscious realists	Balanced compensators	
Town	9 (3.4%)	98 (37.1%)	134 (50.8%)	12 (4.5%)	11 (4.2%)	264
Park	18 (3.6%)	239 (48.0%)	158 (31.7%)	44 (8.8%)	39 (7.8%)	498
Illingworth & Mixenden	14 (5.7%)	84 (34.1%)	113 (45.9%)	17 (6.9%)	18 (7.3%)	246
Ovenden	14 (5.5%)	81 (31.6%)	126 (49.2%)	20 (7.8%)	15 (5.9%)	256
Total	55 (4.4%)	502 (39.7%)	531 (42.0%)	93 (7.4%)	83 (6.6%)	1264

#### Figure 2.1b: Segmentation profile by ward



It can be seen that the segmentation profiles show some similarities across the target wards. The proportion of individuals categorised as either Live for Today or Unconfident fatalists is 80% or over in each ward, and close to 90% in Town ward. These two segments predominate and are approximately equally represented in the sample. The other categories were less frequent, and the number of respondents categorised as Hedonistic Immortals was considerably lower compared with other segments in all wards.

When these data were compared with the segmentation profile described in the national model [5], some differences were found. Based on a sample of 2109 respondents, The Healthy Foundations national segmentation profile comprises 19% Hedonistic Immortals; 25% Live for Today; 18% Unconfident fatalists: 21% Health-conscious realists and 17% Balanced Compensators. In the lifestyle survey sample, Live for Todays and Unconfident fatalists are over-represented whereas other categories, particularly Hedonistic immortals, are under-represented – see figures 2.1c and 2.1d:



In order to investigate whether the lifestyle survey sample could potentially be matched to the national or synthetic segmentation profiles based on other characteristics, results were stratified by gender, ethnicity, age, household income and BMI.

#### 2.1.1 Gender

In order to calculate a segmentation profile based on gender, only those respondents who completed the whole questionnaire and who reported their gender were included in the analysis (n=1253). The findings are detailed below:

#### Figure 2.2: Gender of segmentation profiles: national and lifestyle survey samples

Segment	Lifestyle Survey s	ample (n=1253)	Healthy Foundations sample (n=2109)		
	Male	Female	Male	Female	
Hedonistic Immortals	37/58 (36.2%)	21/58 (63.8%)	50%	50%	
Live for today	262/506 (51.8%)	244/506 (41.8%)	49%	51%	
Unconfident fatalists	225/497 (45.3%)	272/497 (54.7%)	48%	52%	
Health conscious realists	58/106 (54.7%)	48/106 (45.3%)	43%	57%	
Balanced compensators	55/86 (64.0%)	31/86 (36.0%)	56%	44%	
All adults	637/1253 (50.8%)	616/1253 (49.2%)	49%	51%	

The Healthy Foundations segmentation model suggests that some gender biases exist in different segments. A stronger female bias in the Health Conscious Realist segment, and a stronger male bias within the Balanced Compensator segment are reported [40]. The lifestyle survey findings support the assumption of female bias within the Health Conscious Realist segment. However, the survey sample also shows a female bias within the Balanced Compensator segment, whereas the national model suggest a male bias should be expected.

There are statistically significant differences in gender balance for the national and lifestyle survey segment profiles for the following segments: Hedonistic Immortals (p=0.048); Unconfident fatalists (p<0.001); Health Conscious Realists segment (p<0.001); Balanced Compensators (p=0.014). However, the estimated effect sizes are small in magnitude. In the Live for Today segment, the difference between the local and national gender balance was not statistically significant (p=0.377).

## 2.1.2 Ethnicity

In order to calculate a segmentation profile based on ethnicity, only those respondents who completed the whole questionnaire and who reported their ethnicity were included in the analysis (n=1334). The findings are detailed below:

#### Figure 2.3: Ethnicity of segmentation profiles: national and lifestyle survey samples

Segment	Life	Healthy Foundations sam- ple (n=2109)				
3	White	Asian	Other	White	Asian	Other
Hedonistic Immortals	56/61 (91.8%)	5/61 (8.2%)	0/61 (0.0%)	96%	1%	3%
Live for today	423/523 (80.9%)	90/523 (17.2%)	10/523 (1.9%)	88%	6%	6%
Unconfident fatalists	332/553 (60.0%)	191/553 (34.5%)	30/553 (5.4%)	91%	3%	6%
Health-conscious realists	96/107 (89.7%)	10/107 (9.3%)	1/107 (0.9%)	91%	4%	5%
Balanced compensators	80/90 (88.9%)	7/90 (7.8%)	3/90 (3.3%)	80%	8%	12%
All adults	987/1334 (74.0%)	303/1334 (22.7%)	44/1334 (3.3%)	<b>89</b> %	4%	7%

In comparison to national Healthy Foundations segment profiles, all segments have a higher proportion of Asian respondents. This reflects the demographics of the target wards in contrast with national averages.

There are statistically significant differences in the ethnicity balance between the national and lifestyle segment profiles for the following segments: Hedonistic Immortals (p=0.001); Live for Todays (p<0.001); Unconfident Fatalists (p<0.001). However, the estimated effect sizes are small in magnitude. In the Health Conscious Realist and Balanced Compensator segments, the differences in ethnicity balance between the national and lifestyle survey segmentation profiles were not statistically significant.

## 2.1.3 Age

In order to calculate a segmentation profile based on age bracket, only those respondents who completed the whole questionnaire and who reported their age were included in the analysis (n=1316). The findings are detailed below:

Segment	Age group (n=1316)								
Segment	18-24	25-34	35-44	45-54	55-64	65-74	75+		
Hedonistic Immortals	42.9%	19.4%	16.1%	8.1%	1.6%	9.7%	3.2%		
Live for today	10.6%	23.8%	22.1%	18.5%	13.5%	8.8%	2.7%		
Unconfident fatalists	12.8%	15.0%	15.9%	21.2%	15.2%	14.3%	5.7%		
Health-conscious realists	15.7%	24.5%	22.5%	13.7%	9.8%	10.8%	2.9%		
Balanced compensators	9.4%	24.7%	28.2%	9.4%	14.1%	12.9%	1.2%		
All adults	13.3%	20.1%	19.7%	18.2%	13.4%	11.6%	3.9%		

Figure 2.4: Age brackets in lifestyle survey segmentation profiles

The Hedonistic immortals segment contains the greatest proportion of the 18–24 age group at over 40%, and over 60% aged under 34. Unconfident fatalists contain the greatest proportion aged 35 or above. It is not possible to statistically compare the age structure with the national profile, or with Calderdale ward profiles as they are bracketed differently However, the national segmentation model asserts that Health Conscious Realists and Unconfident Fatalists have an older than average age (47 years compared to 43), Live for Todays have an average age of 42, Balanced Compensators have a slightly younger average age of 41 and Hedonistic Immortals have the youngest average age of 36. These age profiles are comparable to those found in the lifestyle survey sample.

## 2.1.4 Household income

In order to calculate a segmentation profile based on household income bracket, only those respondents who completed the whole questionnaire and who reported their household income were included in the analysis (n=459). The findings are detailed below:

Figure 2 F. Heusehold	in como in lifectulo	our cover and profiles
FIGULE Z.S. HOUSEHOIG	income in mestvie	e survey segment profiles

Segment	Income bracket (n=459)						
Segment	less than £9,999	£10,000- £19,999	£20,000- £29999	£30,000- £39,999	£40,000- £49,999	£50,000+	
Hedonistic Immortals	33.3%	23.1%	20.5	12.8%	10.3%	0.0%	
Live for today	23.8%	34.6%	26.2%	12.4%	2.0%	1.0%	
Unconfident fatalists	43.7%	41.7%	7.3%	5.2%	1.0%	1.0%	
Health conscious realists	28.1%	32.8%	18.8%	7.8%	9.4%	3.1%	
Balanced compensators	24.2%	34.5%	13.8%	17.2%	6.9%	3.4%	
All adults	29.4%	34.9%	19.2%	10.9%	4.1%	1.5%	

Unconfident fatalists contained the highest proportion of respondents with an income less than £9999 and below £19,999. Unconfident fatalists and Live for todays had the smallest proportion of respondents with a household income above £40,000. This aligns with the Healthy Foundations model which suggests that individuals who are categorised as Unconfident Fatalists and Live for Todays tend to live in more deprived areas, an indicator of this being lower household income [40, 42].

#### 2.1.5 BMI

In order to calculate a segmentation profile based on BMI, only those respondents who completed the whole questionnaire and who reported their BMI were included in the analysis (n=1234). The findings were categorised according to a BMI of >25 as overweight and >30 as obese – see below:

Segment	Lifestyle Survey san	nple (n=1234)	Healthy Foundations sample (n=2109)		
	BMI > 25.0	BMI <=25.0	BMI > 25.0	BMI <=25.0	
Hedonistic immortals	37.5%	62.5%	44.1%	55.9%	
Live for today	58.8%	41.2%	50.9%	49.1%	
Unconfident fatalists	56.8%	43.2%	56.3%	43.7%	
Health conscious realists	39.8%	60.2%	49.4%	50.6%	
Balanced compensators	55.8%	44.2%	42.6%	57.4%	
All adults	55.4%	44.6%	48.3%	51.7%	

#### Figure 2.6: BMI of segmentation profiles: national and lifestyle survey samples

Live for Todays and Unconfident Fatalists in the lifestyle survey sample comprised a higher percentage of respondents with a BMI greater than 25 in comparison to the national sample. In the lifestyle survey sample, Live for Todays, Unconfident Fatalists and Balanced Compensators all comprised over 50% of respondents with a BMI greater than 25. This in contrast to the national sample figures where only Live for Todays and Unconfident Fatalists report BMIs in the overweight range (BMI>25).

#### 2.1.6 Deprivation

The differences found between the lifestyle survey segmentation profile and the national profile is not wholly surprising because the two samples are not comparable in terms of demography. Therefore, the lifestyle survey segmentation profile was compared with the synthetic estimate for the segmentation profile of the most deprived national quintile [41] – see below:







Figure 2.7b: Lifestyle survey segmentation profile



The synthetic model estimates that the most deprived quintiles will have greater proportions of Unconfident Fatalist and Live for Today segments, and lower proportions of Hedonistic Immortal, Health Conscious Realist and Balanced Compensator segments. This was not replicated in the lifestyle survey sample which comprised an over-representation of Unconfident Fatalist and Live for Today segments and an under-representation of Hedonistic Immortal, Balanced Compensator and Health Conscious Realist segments.

A one-sample chi-squared test demonstrated a significant difference between the survey sample and the synthetic estimates (X<sup>2</sup> =405; p<0.001). The magnitude of the effect (phi-coefficient) is 54.9%, a moderate to large effect. This appears to be due to over-representation of Live for Today and Unconfident Fatalist segments in the lifestyle survey sample, and Health Conscious Realists, Hedonistic Immortals and Balanced Compensators segments are under-represented in the survey sample by about eight percentage points.

## Key points: Healthy Foundations segmentation profile

- There were some key differences and similarities between the national segmentation profile and that of the lifestyle survey sample in terms of demographics and health measures. For example, the gender composition in each segment derived from the lifestyle survey data was not comparable with the national model, nor were the segment compositions based on ethnicity and BMI. However, the composition of segments based on age in the lifestyle survey sample appears to be broadly similar to the national sample. These findings question the generalisability of the national model when used at a local level as the lifestyle survey sample was a representative local sample. Further application of the model at the local level may be needed, exploring cross-cultural differences and relevance of the tool in demographically diverse areas with poor health outcomes.
- The Healthy Foundations synthetic estimates [43] for the most deprived national quintile allowed a more accurate comparison of segmentation profiles between the lifestyle survey sample and national figures. However, significant differences between the samples were found. This may be because synthetic estimates are based on statistical modelling, and therefore do not capture the change and complexity of local populations, and may lack some specificity and sensitivity. Further research augmenting the ward segmentation profiles with Geographic Information Systems (GIS) might identify more precise neighbourhoods and local 'pockets' where interventions may be more effective, may meet with greater resistance, or may have the biggest impact on reducing health inequalities .
- The predominant segments within the target communities were identified as Live for Today and Unconfident Fatalist, but these have been proposed as the most challenging to influence and engage in health promoting interventions, having lower motivation to change health behaviour. The Healthy Foundations Model recommends specific approaches for working with such segments and suggests high intensity interventions are likely to be most beneficial. The most effective strategies are proposed to include on-going monitoring, mentoring, evaluation, and hands-on and practical initiatives. Personalised approaches, health checks outside a health setting, tackling mental health issues and peer-led interventions such as those incorporating health trainers are identified [40]. All these strategies have been employed in the Halifax Healthy Towns programme.

## 3. Diet

## 3.1 Consumption of fruit and vegetables

Respondents were asked to record their daily consumption of fruit and vegetables (n=1328). The mean number of daily portions of fruit and vegetables consumed in all four wards was below the Department of Health recommendation of five portions per day [8]. The average daily consumption in Town ward was 3.13 portions (95% confidence interval 2.89% – 3.37%), 3.66 in Park ward (95% confidence interval 3.47% – 3.84%), 3.38 in Illingworth and Mixenden ward (95% confidence interval 3.11% – 3.64%) and 3.22 in Ovenden ward (95% confidence interval 2.95% – 3.48%). Comparing these data to the national averages reported in the Health Survey for England 2009 for the most deprived quintile by household income [33], the target wards appear to have higher mean daily consumption of fruit and vegetables (recorded as 2.9 for men and 3.1 for women).

The largest proportion of respondents reporting no consumption of fruit or vegetables was found in Ovenden ward (28 out of 263; 10.6%: 95% confidence interval 6.9% - 14.3%). The proportion of respondents consuming five or more portions per day was greatest in Park ward (146 out of 539; 27.1%: 95% confidence interval 23.3% - 30.9%), followed by 25.0% in Illingworth & Mixenden ward (64 out of 257: 95% confidence interval 23.3% - 27.7%); 22.1% in Ovenden ward (58 out of 263: 95% confidence interval 23.3% - 27.7%); 22.1% in Ovenden ward (58 out of 263: 95% confidence interval 23.3% - 27.7%); no ovenden ward (58 out of 263: 95% confidence interval 23.3% - 27.7%); 22.1% in Ovenden ward (58 out of 263: 95% confidence interval 22.8% - 27.8%). In comparison to the Health Survey for England 2009 figures for the most deprived national quintile (18% men, and 19% women), the target wards have a higher proportion of respondents consuming the recommended five portions of fruit and vegetables a day.

## 3.2 Consumption of meals prepared and cooked from basic ingredients

Respondents were also asked how often they ate meals that had been prepared and cooked from basic ingredients (n=1327). The frequency of the consumption of meals cooked from basic ingredients was generally higher in Park and Ovenden wards than in Town and Illingworth & Mixenden wards. The proportion of respondents reporting daily consumption of meals that had been prepared and cooked from basic ingredients was highest in Park ward (104 out of 535; 19.4%: 95% confidence interval 16.0% - 22.8%) and lowest in Town ward (10 out of 270; 3.7%: 95% confidence interval 0.6% - 6.0%). The proportion of respondents reporting that they never consumed meals that had been prepared and cooked from basic ingredients was highest in Park ward (14 out of 535; 2.6%: 95% confidence interval 1.2% - 4.0%) and lowest in Illingworth & Mixenden ward (2 out of 258; 0.8%: 95% confidence interval 0.0% - 3.9%). The distribution of responses from all wards is summarised in figures 3.2a-3.2d.



Figure 3.2c: Frequency of meals from basic ingredients, Illingworth and Mixenden



Figure 3.2b: Frequency of meals from basic ingredients, Park



Figure 3.2d: Frequency of meals from basic ingredients, Ovenden



## 3.3 The importance of healthy eating

Respondents were asked to rank five statements concerning healthy eating in order of importance, the most important statement was ranked as 1 and the least important was ranked as 5 – see Figure 3.3a:

#### Figure 3.3a: Important aspects of healthy eating statements

Statement 1: Choosing food products and dishes that you enjoy eating
Statement 2: Eating a healthy diet
Statement 3: Keeping your spending on food as low as possible
Statement 4: Eating your meals in the company of other people
Statement 5: Choosing food products and dishes that are quick and easy to prepare

The mean rank order of each statement in each of the wards studied is summarised in figure 3.3b.

Ward	Mean rank order						
waru	Statement 1 (n=1319)	Statement 2 (n=1319)	Statement 3 (n=1320)	Statement 4 (n=1320)	Statement 5 (n=1320)		
Town	2.63	2.58	2.70	3.47	3.59		
Park	2.25	2.35	3.12	3.70	3.80		
Illingworth & Mixenden	2.43	2.37	2.83	3.74	3.61		
Ovenden	2.52	2.58	2.72	3.50	3.60		

#### Figure 3.3b: Mean ranking of statements related to importance of healthy eating

The lower the mean, the more important respondents viewed the statement. The rank ordering of most of the statements was fairly consistent, with Statements 1 and 2 being ranked as the two most important, and Statement 3 being ranked as the third most important, in each of the four wards studied. Statements 4 and 5 were consistently ranked as approximately equal, but of lower importance than other statements. This suggests that respondents ranked enjoyment and health more important than the cost of food, with eating in company and eating quick and easy food ranked as the least important.

## 3.4 Confidence in healthy eating

Respondents were also asked to rate their levels of confidence in a number of statements relating to choosing, cooking and growing healthy food on a 7-point scale, with 1 representing the lowest and 7 the highest levels of confidence. The statements were as follows:

#### Figure 3.4a: Confidence in healthy eating statements

Statement 1: Choosing healthy food products when shopping
Statement 2: Being able to cook from basic ingredients
Statement 3: Following a simple recipe
Statement 4: Eating healthily
Statement 5: Growing your own food

The mean response to each statement in each of the wards studied is summarised in Figure 3.4b.

	Mean response						
Ward	Statement 1 (n=1328)	Statement 2 (n=1330)	Statement 3 (n=1333)	Statement 4 (n=1332)	Statement 5 (n=1330)		
Town	4.62	4.49	4.62	4.45	3.23		
Park	4.88	4.81	4.92	4.79	3.02		
Illingworth & Mixenden	4.72	4.63	4.76	4.64	3.64		
Ovenden	4.69	4.67	4.82	4.53	3.27		

#### Figure 3.4b: Mean ranking of confidence in response to healthy eating statements

The similarity of responses to statements 1 to 4 may be noted. No significant differences in responses to any of the statements were noted across the four wards, but the data appeared to indicate a greater confidence expressed about choosing, cooking and eating healthy foods than with growing food.

## 3.5 Enjoyment of healthy food

Respondents were also asked to rate their levels of agreement on a 5-point scale (from Strongly agree to Strongly disagree) in relation to three statements below referring to the enjoyment of healthy food.

#### Figure 3.5a: Enjoyment of healthy food statements

Statement 1: I enjoy putting effort and care into the food I eat.Statement 2: I enjoy eating healthy food.Statement 3: Healthy food often tastes nicer than unhealthy food.

In general, stronger levels of agreement to Statement 1 were found across all wards compared with levels of disagreement. The responses are summarised in figure 3.5b:

# Ovenden Illingworth & Mixenden Park Town 0% 20% 40% 60% 80% 100% Disagree strongly Disagree Neither agree nor disagree Agree Agree strongly

In general, stronger levels of agreement to Statement 2 were found across all wards compared with levels of disagreement. The distribution of responses is summarised in figure 3.5c:

#### Figure 3.5c: Distribution of responses (n=1334) to Statement 2

Figure 3.5b: Distribution of responses (n=1335) to Statement 1



For Statement 3, the most frequent response was Neither agree nor disagree in all wards. The distribution of responses is summarised in Figure 3.5d.

### Figure 3.5d: Distribution of responses (n=1332) to Statement 3



## 3.6 Purchasing healthy food

Respondents were asked whether they were able to purchase healthy food in their local area easily. Across all wards the majority of respondents (n=1184) stated that they were able to buy healthy food easily, but this proportion was higher in Town (239 out of 245; 97.6%: 95% confidence interval 95.7% - 99.5%) and Park wards (442 out of 470; 94.0%: 95% confidence interval 93.9% - 96.1%) than in Illingworth & Mixenden (208 out of 232; 89.7%: 95% confidence interval 85.8% - 93.6%) and Ovenden wards (215 out of 237; 90.7%: 95% confidence interval 87.4% - 94.0%).

Those respondents who reported that they were unable to buy healthy food in their local area easily (n=332) were asked to identify reasons for this which applied to them – see figure 3.6:

#### Figure 3.6: Reasons for not eating healthy food

	Frequency (percentage) of responses by ward			
Statement	Town	Park	Illingworth & Mixenden	Ovenden
No healthy food shops in area	3 (1.1)	15 (2.8)	10 (3.9)	12 (4.5)
The range of healthy food shops is limited	2 (0.7)	26 (4.8)	7 (2.7)	12 (4.5)
Healthy food that is available locally is too expensive	4 (1.4)	22 (4.0)	12 (4.7)	15 (5.6)
I need to travel to get to the supermarket	2 (0.7)	19 (3.5)	15 (5.8)	10 (3.8)
l don't have a car	3 (1.1)	23 (4.2)	6 (2.3)	9 (3.4)
It is easier and more affordable to buy takeaway and convenience food in my area	1 (0.4)	15 (2.8)	7 (2.7)	6 (2.3)
I find it hard to get my family to eat healthy food	0 (0.0)	14 (2.6)	4 (1.6)	7 (2.6)
I haven't got time to cook and prepare healthy food	2 (0.7)	11 (2.0)	4 (1.6)	5 (1.9)
I don't like healthy food	0 (0.0)	9 (1.7)	4 (1.6)	4 (1.5)
My family doesn't cook healthy food for me	0 (0.0)	8 (1.5)	1 (0.4)	3 (1.1)

Travel-related reasons (I don't have a car, I need to travel to get to the supermarket) and cost-related reasons (Healthy food that is available locally is too expensive) were cited more frequently than other reasons.

## Key points: Diet

• A positive finding was that the majority of respondents in all wards stated that they could easily purchase healthy food in their local areas. However, the amount of times that respondents ate food from cooked and basic ingredients was found to be modest, and there was also neutrality ('neither agree nor disagree') expressed toward statements concerning putting effort into, enjoying and preferring the taste of healthy food. These findings suggest that availability may not be a problem, but other barriers to purchasing healthier food in low-income areas (indicated by respondents as travel and cost-related), along with a lack of knowledge and enjoyment related to preparing healthy food may be stronger influences on healthier eating. In addition, no examples of healthy food were provided in the questions, giving rise to an open interpretation by the respondent.

## 4. Alcohol

## 4.1 Alcohol consumption in the last 7 days

The highest proportion of respondents who reported drinking alcohol (n=488) was found in Illingworth & Mixenden (138 out of 258; 53.5%: 95% confidence interval 47.4% - 59.6%), followed by Ovenden (134 out of 265; 50.6%: 95% confidence interval 44.5% - 56.7%) and Town (119 out of 270; 44.1%: 95% confidence interval 38.0% - 50.2%). The proportion in Park ward was significantly lower at 92 out of 545 (16.9%: 95% confidence interval 13.8% - 20.0%). A difference in weekly alcohol consumption was observed across the four wards, with the figure for Park ward (0.95 units: 95% confidence interval 0.4% - 1.5%) again being somewhat lower than the figures for Town (9.5 units: 95% confidence interval 6.9% - 12.8%), Illingworth & Mixenden (7.1 units: 95% confidence interval 4.9% - 9.2%) and Ovenden (6.9 units: 95% confidence interval 5.1% - 8.7%). Respondents in all wards except Park reported drinking more units of alcohol than the average weekly maximum recommended guidelines of 12.4 units per week [44].

Park ward has a high proportion of Asian residents, which could be linked to lower alcohol consumption. White respondents reported an average weekly consumption of 15.8 units (95% confidence interval. 14.5% - 17.6%), and Asian respondents reported a much lower weekly consumption of 0.3 (95% confidence interval 0.0 - 0.6) units per week. This difference between ethnic groups is highly significant.

The proportion of individuals exceeding the upper limits of Department of Health recommendations of a maximum of three to four units per day for males and two to three units per day for females [10] was also examined for those respondents whose gender and alcohol consumption was recorded. In Town ward, 39 out of 57 (68.2%) males and 10 out of 59 females (16.9%) were exceeding recommended limits, giving an overall proportion of 49 out of 116 respondents (42.2%: 95% confidence interval 33.3% - 51.2%) exceeding limits. In Park ward, 23 out of 135 (17.0%) males and 11 out of 202 females (5.4%) were exceeding recommended limits, giving an overall proportion of 34 out of 337 respondents (10.1%: 95% confidence interval 6.9% - 13.3%) exceeding limits. In Illingworth & Mixenden ward, 28 out of 63 (44.4%) males and 17 out of 88 females (19.3%) were exceeding recommended limits, giving an overall proportion of 45 out of 55 (50.9%) males and 17 out of 96 females (18.8%) were exceeding recommended limits, giving an overall proportion of 46 out of 151 respondents (30.4%: 95% confidence interval 23.1% - 37.7%) exceeding limits. In Ovenden ward, 28 out of 60 ut of 151 respondents (30.4%: 95% confidence interval 23.1% - 37.7%) exceeding limits. In comparison to an Office for National Statistics survey [44] in which 39% of men and 31% of women had exceeded recommended drinking limits in the last week, there appears to be a lower prevalence of women exceeding weekly limits and a greater prevalence of men exceeding limits across all wards compared to the national average. Park ward is the exception, in which both men and women have a lower prevalence of exceeding limits.

### Key points: Alcohol

- Asian respondents had a statistically significantly lower mean weekly consumption of alcohol units. Evidence suggests alcohol consumption is socially unacceptable within many populations of Indian or Pakistani heritage, particularly the Muslim community [45]. However, this question could be perceived as sensitive, or offensive to, many Muslim communities and individuals may decline to answer this question. The use of well-known members of BME communities in the distribution of the lifestyle survey may also have inhibited disclosure of information contrary to acceptable cultural norms.
- Key objectives outlined in the Calderdale Substance Misuse Partnership's Strategic Approach to Tackling the Harms of Alcohol include raising awareness and promoting safe levels of alcohol consumption [46]. It may be that people do not understand alcohol units, or are not aware of the Department of Health recommended guidelines. The key focus of the strategy is on changing social norms and promoting responsible alcohol consumption, including reducing binge drinking, and to reduce alcohol related health problems and hospital admissions. Findings from the lifestyle survey indicate that social marketing campaigns developed according to the alcohol strategy should be tailored to target white males, particularly in Ovenden, Town and Illingworth and Mixenden, as these characteristics and localities appear to be associated with greater prevalence of alcohol misuse.

## 5. Smoking

## 5.1 Smoking prevalence

Respondents were asked whether they had ever smoked (n=488), and whether they were current smokers (n=394). In Town ward, 104 out of 268 (38.7%) of respondents had ever smoked (95% confidence interval 32.9% - 44.5%), and of these, 32.3% were current smokers. In Park ward, 144 out of 537 (26.5%) of respondents had ever smoked (95% confidence interval (22.8% - 30.2%), and of these, 20.6% were current smokers. In Illingworth & Mixenden ward, 123 out of 256 (47.9%) of respondents had ever smoked (95% confidence interval 43.8% - 54.0%), and of these, 40.0% were current smokers. In Ovenden ward, 117 out of 265 (44.0%) of respondents had ever smoked (95% confidence interval 38.0% - 50.0%), and of these, 34.6% were current smokers.

Hence the proportion of current smokers, and those who had ever smoked, was somewhat lower in Park ward than in the other three wards studied. It has been estimated that 25-26% of Calderdale's adult population smoke [2]. Therefore all four wards have above average prevalence of current smokers in comparison to regional figures, and also the General Lifestyle Survey 2009, which states 21% of the adult population in Great Britain smoke cigarettes [47].

A slightly higher proportion of males (38.3%: 95% confidence interval 34.7% - 41.9%) than females (34.8%: 95% confidence interval 31.1% - 38.5%) reported that they had ever smoked. More males also reported themselves as current smokers (32.0%) than females (26.3%). Hence the proportion of ex-smokers is higher in females than in males.

## 5.2 Smoking frequency

Respondents identified as current smokers were also asked about the frequency of use of cigarettes and tobacco products. The majority of smokers reported using cigarettes and tobacco products on a daily basis. This was consistent across wards; ranging between 97.3% and 98.1%. In comparison, national data suggests that 57% of smokers felt unable to go without smoking for a whole day, suggesting they smoked daily [47]. Therefore prevalence of daily smoking may be higher within the lifestyle survey sample compared with national figures.

## 5.3 Smoking locations

Respondents were asked where they smoke; the proportions stating a particular location given in each ward are given in figure 5.1. All rooms and Outside are more frequently cited locations by respondents in all wards. Some respondents reported smoking in more than one location such as home and workplace.

#### Figure 5.1: Location of smoking activity

	Location						
Ward	One room	All rooms	Outside	Workplace			
Town	9 (10.0%)	60 (66.7%)	45 (50.0%)	23 (25.6%)			
Park	13 (10.7%)	55 (45.5%)	70 (58.3%)	27 (22.5%)			
Illingworth & Mixenden	20 (19.2%)	76 (73.1%)	50 (48.1%)	18 (17.3%)			
Ovenden	16 (16.7%)	51 (53.1%)	53 (55.2%)	19 (19.8%)			

This contrasts to national figures, which state that 69% of people did not smoke in their home, 20% smoked in one or some rooms, and only 10% said they smoked anywhere in their home [48].

## 5.4 Purchase of cigarettes/tobacco products

Respondents identified as current smokers were also asked where they were most likely to buy cigarettes or tobacco products. The most common place of purchase in all wards was from a shop or supermarket. Some respondents reported buying cigarettes or tobacco products in more than one of these categories and/or from other sources, e.g. vending machines. Very few smokers in any of the wards reported buying cigarettes or tobacco products from friends or work colleagues.

## 5.5 Intention to quit

Respondents identified as current smokers were asked whether they had thought about giving up. Responses ranged from 21.1% in Illingworth & Mixenden to 26.3% in Ovenden. Responses are summarised in figure 5.2:

Figure 5.2:	Proportion of	ofrespondents	considering	stopping s	moking
9					

Ward	Respondents who had considered giving up smoking
Town	22.2% (n=20)
Park	23.3% (n=28)
Illingworth & Mixenden	21.2% (n=22)
Ovenden	26.3% (n=25)

In comparison to national figures (63%), this is a much lower prevalence of intention to quit smoking [47]. According to the Stages of Change theory, this suggests that approximately 70-80% of smokers surveyed are in the pre-contemplation stage of change, which is perceived as prerequisite for successful smoking cessation [12-15].

Respondents who had reported that they had considered giving up smoking were also asked to indicate the timeframe in which they intended to quit. In all wards, the most common response was that respondents planned to give up using cigarettes or tobacco products within the next 12 weeks.

## Key points: Smoking

- Although smoking is becoming increasingly socially unacceptable nationally [49], the findings from the lifestyle survey indicate higher than average levels of smoking, suggesting that smoking may represent a strong social norm in some areas of the target wards [50]. Recent research highlights pathways that link locality to smoking behaviour, including place-based practices (e.g. local social norms), and place-based regulation, (e.g. the smoking ban and whether comfortable alternative areas are provided) [35].
- Results also highlight a concern about passive smoking in the home, relevant to dependent children and outreach staff who regularly visit homes within these communities. These findings suggest that health campaigns within these localities should focus on reducing smoking within the home and increasing education about the risks of passive smoking, particularly to children.
- A high proportion of respondents had not contemplated stopping smoking. Therefore, interventions need to be predominantly targeted towards people in the pre-contemplation stage [12-14]. Social marketing campaigns focusing on reasons to quit may therefore increase intentionality in this group, a pre-requisite to smoking cessation.
- A higher proportion of respondents reported that they had ever smoked than currently smoked which suggests some success in smoking cessation in the target areas. Local members of the community who have successfully quit smoking could be recruited for further research to identify which messages worked in these localities, and such individuals could also be recruited to engage in peer mentoring and community engagement initiatives related to smoking cessation.
- Calderdale JSNA 2011 highlights the issue of the illegal sale of tobacco, and during interviews across the North West, the North East and Yorkshire and the Humber conducted in 2009, one in five smokers disclosed illegal purchase of tobacco [51]. Findings from the lifestyle survey suggest fewer people in the target wards purchased tobacco illegally compared with the above findings. However, respondents in the lifestyle survey sample may have been unlikely to report illegal purchase of tobacco, particularly as surveys were primarily conducted face-to-face in the street, or by a member of the local community. More anonymous methods of data collection may need to be used to gather information on this subject.

# 6. Physical Activity

## 6.1 Activity level by ward

Physical activity level was categorised into Low, Moderate and High from data relating to amount of time spent walking, and engagement in moderate and vigorous exercise. Physical activity level was scored for respondents who provided data for all three of these categories (n=1228). It may be seen from figures 6.1a and 6.1b, that there is some variation in levels of physical activity across the wards.

Ward	Low activity	Moderate activity	High activity	Total
Town	208 (80.0%)	40 (15.4%)	12 (4.6%)	260
Park	321 (69.0%)	92 (19.8%)	52 (11.2%)	465
Illingworth & Mixenden	176 (71.8%)	43 (17.6%)	26 (10.6%)	245
Ovenden	179 (69.4%)	50 (19.4%)	29 (11.2%)	258
Total	884	225	119	1228

## Figure 6.1a: Activity level profile by ward

#### Figure 6.1b: Activity level profile by ward



Town ward reported the lowest levels of physical activity overall, with the greatest proportion of respondents in the Low category and the smallest proportion of respondents in the High category. Other wards show similar levels of activity.

The majority of respondents were categorised as having low physical activity levels, ranging from 69.0% in Park (95% confidence interval 64.8% - 73.2%) to 80.0% in Town (95% confidence interval 75.1% - 84.9%). This is below the current recommended guidelines for physical activity of at least 30 minutes at least five times per week [52]. The proportions of respondents who stated zero hours of activity (n=438) included 43.3% in Town, 26.1% in Park, 91 35.3% in Illingworth & Mixenden, and 33.1% in Ovenden wards. For all four target wards, the proportion of respondents reporting zero hours of physical activity was 36.2% (95% confidence interval (33.5% - 38.9%).

Calderdale JSNA 2011 indicates that 49.1% of Calderdale population did not engage in any physical activity in the last 4 weeks [2]. Although physical activity levels were measured differently in the lifestyle survey, findings do suggest predominantly low physical activity levels in the same areas. A lower proportion of respondents to the lifestyle survey met the recommended physical activity levels compared with the national average figures, with only 21% of men and 31% of women achieving the recommended levels [53].

## 6.2 Sedentary behaviour

In addition to the measure of physical activity level described above, the lifestyle survey also recorded the amount of time respondents spent sitting on a typical weekday. The modal response in all wards was between 5 and 8 hours per day. This is illustrated in figure 6.2:



#### Figure 6.2: Response to time spent sitting across wards

## 6.3 Activity in employment

The above levels of activity may in part reflect the employment status of the respondents. Of those that responded to the question asking about level of physical activity in employment (n=1308), the modal response in all wards was not employed, varying between 68.9% of respondents in Town ward and 61.9% of respondents in Park ward. The minority of respondents across all wards were in employment involving physical effort (the largest proportion being 11.0% in Ovenden ward), and 3% or less of respondents from all wards were in employment involving vigorous physical effort – see Figure 6.3:

#### Figure 6.3: Activity in employment response


#### 6.4 Enjoyment of physical activity

The survey recorded the respondents' enjoyment of physical activity. Respondents were asked to rate their enjoyment levels on a seven point scale, with 1 representing the lowest and 7 the highest level of enjoyment. The majority rated their enjoyment levels as medium or high, with mean values measured across the four wards studied found to be similar; ranging from 4.16 in Town ward to 4.45 in Park ward.

#### 6.5 Barriers to engaging in physical activity

The survey asked for reasons as to why they find it difficult to take part in physical activity. Respondents were given the option to select from 13 reasons, and across all wards the same four responses were the most common and were recorded in the top three reasons per ward – see Figure 6.4:

#### Figure 6.4: Barriers to engaging in physical activity

Park

Difficult to find the time 41.3%; Not interested 37.6%; Too expensive 30.6%

#### Illingworth & Mixenden

Not interested 40.3%; Too expensive 34.5%; Nothing in local area 21.7%

#### Town

Not interested 55.2%; Too expensive: 38.5%; Nothing in local area: 29.3%

#### Ovenden

Too expensive 42.1%; Not interested 38.7%; Difficult to find the time 27.8%

#### Key points: Physical activity

- A high proportion of respondents reported activity levels below recommended limits [52] and below Calderdale and national averages [2, 53]. Low levels of physical activity are consistently linked with increased health risks, and these results could highlight one of the main reasons for poor health outcomes and health inequalities in the target wards [30].
- There is a discrepancy between the relatively high number of respondents who stated that they enjoy physical activity, and the low number of respondents who participate in activity. This suggests that there is a proportion of respondents who would like to engage but are choosing not to, are not being engaged by what is currently on offer, have difficulty accessing existing facilities/initiatives, or simply reflecting the difference between perceiving/reporting something as enjoyable and actually undertaking the activity.

## 7. Community Cohesion

#### 7.1 Community participation

Respondents were asked how often they took part in community activities (n=1254). The modal response in all four wards was Never, with response rates for this category ranging from 81.7% in Ovenden ward to 68.6% in Park ward. This suggests that the majority of respondents were not actively involved within their communities. This is comparable to the YHPHO figure for Calderdale reporting that only 17.1% of the population are involved in civic participation [54]. However, the second highest response in all wards was At least once a week indicating a discrepancy in the results. The reported proportions for this response varied from 11.2% in Park ward to 6.7% in Illingworth & Mixenden ward and Town ward. The proportions of responses in other categories were relatively minimal. The data is summarised in figure 7.1:

#### Figure 7.1: Summary of community involvement levels of respondents



#### 7.2 Perceptions of community

Respondents were also asked to record their level of agreement with a number of statements about their community, using a 5-point scale. The statements are described in figure 7.2a

#### Figure 7.2a: Perceptions of community statements

Statement 1:	In general, I think that the majority of people in my community can be trusted
Statement 2:	In general, I think that the majority of people in my community get along with each other
Statement 3:	In general, I think that the majority of people in my community would help me if I needed them
Statement 4:	There are people in my life who really care about me
Statement 5:	I regularly meet socially with friends and relatives
Statement 6:	I find it difficult to meet with people who share my interests or hobbies

The level of response to all statements was fairly similar and consistent across the four wards, and the two most frequently cited responses were Agree or Neither Agree nor Disagree. These two categories accounted for 60% to 70% of all responses. The responses to Statements 1 to 3 are summarised in figures 7.2b-d:



#### Figure 7.2b: Summary of responses to Statement 1

#### Figure 7.2c: Summary of responses to Statement 2



#### Figure 7.2d: Summary of responses to Statement 3



Statements 4 and 5 yielded the responses Agree and Agree strongly most frequently, accounting for over 60% of all responses across the target wards. The responses to these statements are summarised in figures 7.2e & f:



#### Figure 7.2e: Summary of responses to Statement 4

#### Figure 7.2f: Summary of responses to Statement 5



Statement 6 was scored in reverse and hence would not be expected to yield the same response as other questions, but followed the general trend with the most frequently cited responses across all wards being Disagree and Neither agree nor disagree. The distribution of responses to this question is summarised in figure 7.2g below:





#### 7.3 Neighbourhood support

Respondents were also asked to indicate whether they would be able to call upon someone locally to help at short notice with tasks such as babysitting or moving heavy furniture (n=796). The proportion stating that they believed they would be able to call on someone locally was highest in Park ward, at 271 out of 324 (83.6%: 95% confidence interval 79.6% – 87.6%), followed by Ovenden ward at 116 out of 157 (73.9%: 95% confidence interval 67.0% – 80.8%), Illingworth & Mixenden ward at 119 out of 167 (71.3%: 95% confidence interval 64.4% – 78.2%), and Town ward at 101 out of 148 (68.2%: 95% confidence interval 60.7% – 75.9%).

Respondents were also asked to state whether they would be able to call upon someone locally to help in an emergency such as being locked out of their own house (n=734). Again, the proportion stating that they would be able to call on someone locally was highest in Park ward at 254 out of 298 (85.2%: 95% confidence interval 81.2% - 89.2%), followed by Ovenden ward at 116 out of 152 (76.3%: 95% confidence interval 69.5% - 83.1%), Illingworth & Mixenden ward at 108 out of 153 (70.6%: 95% confidence interval 63.4% - 77.8%), and Town ward at 79 out of 131 (60.3%: 95% confidence interval 51.9% - 68.7%).

Respondents were also asked to indicate using a five point scale their overall satisfaction with their neighbourhood as a place to live, using a 5-point scale ranging from Extremely Dissatisfied to Extremely Satisfied. The mean scores recorded in all wards were similar, with the greatest satisfaction in Park ward (3.83), followed by Town ward (3.78), Illingworth and Mixenden ward (3.73) and Ovenden ward (3.72).

#### Key points: Community cohesion

• Although the majority of respondents said they did not take part in community activities, results provide some indication of positive perceptions of the target communities. These findings offer a basis on which to build wider community engagement, cohesion and social capital.

## 8. Community Assets for Health and Wellbeing

Respondents were asked an open-ended question about what they perceived in their communities as contributing to their general health and well-being. Data from responses across all four wards (n=239) identified the following main themes:

#### 8.1 Places of worship

"Places to worship (mosques) help my family to practice with ease"

"If I didn't go to the local church, I would be a lonely person"

"Personally I feel the community is very inclusive and diverse due to the mosques as places of worship"

"I go to church nearly every Sunday and the Father there is great and also the people there are too"

"People give each other lifts to the mosque if needed"

"There is a lovely church with a lovely group of people"

"We as a family have been involved with the local Brownies, Cubs and Scouts groups at Bradshaw Church"

#### 8.2 Green space

"The thing we can actually do in our community is going for walks around the area or go to the nearest park"

"I have a park near my house so I take my girls there for walks so it helps me with my health"

"I, with a few friends from the community go for long walks in the local park"

"We have a field where we jog around me and my mates"

"Well, everything is good in my neighbourhood, but we have a field where kids play on and even adults in summertime"

"There is an abundance of wide open green space in which to walk. Nice scenery and views. Lots of fresh bracing air"

"Hills are a good form of exercise, how can you help but be fit?"

"There are a lot of green spaces where can go for walks"

"I am surrounded by lovely countryside where I enjoy walking"

#### 8.3 Family and friends

"I like the area. I have good relationship with my neighbours, they are my guardian angels"

"My neighbours all look out for each other as I try to do"

"I am surrounded, within a mile or so, by my family and close friends"

"Neighbours are fantastic, supportive and friendly"

"My mates give me advice on what is healthy"

"I have a very good relationship with my daughter who helps, as do other family and neighbours"

#### 8.4 Local facilities/initiatives

"Local shops that I visit while walking are useful in terms of my social wellbeing; the supermarket staff are very helpful"

"The SureStart Centre has been there for me when needed since having my son"

"I go to the local Children's Centre with my little boy at least twice a week. I meet up with other mums and tots to have a chat and gossip"

"The Children's Centre offers advice and hands out Healthy Living vouchers"

"Going to the Children's Centre gives me something to do and keeps me mentally healthy"

#### 8.5 Asset barriers

Respondents in all four wards discussed ideas for developing existing community assets and identified challenges associated with them. Some examples are provided below:



#### Key points: Community assets for health and wellbeing

- Evidence suggests that interventions which utilise local green spaces and faith and community centres can have a positive impact on health and wellbeing as they facilitate social interaction [27, 29, 55-59]. The Faith Sector in Calderdale report (2009) highlighted that faith centres contribute to social capital in their local communities by offering their facilities to other community groups.[29], and building community cohesion and mobilising social capital have been identified as a factor in tackling social inequalities in health and fostering economic development [60-62]. These findings highlight community strengths on which to strengthen community cohesion in order to impact on health and wellbeing [63].
- Whilst there were some useful findings and common themes across all four wards, the relatively low response rate to this question meant that results could not be generalizable to the whole of the target population. Response to this question may have been inhibited by the length of the survey, and because this question was placed at the end of the survey. Feedback from on-street and doorstep distributors indicated that respondents were keen to finish by this point. It was found that those surveys completed electronically tended to have longer answers to this particular question, perhaps because this method provided a more flexible response time. Another explanation for the low response rate could have been that the majority of respondents did not perceive there to be any community assets and therefore did not see the relevance of answering the question.

## Conclusions and Recommendations

#### Poor health behaviours may be a social norm in the target communities .

Findings from this lifestyle survey suggest that poor health behaviours constitute predominant social norms within these wards [34]. Such behaviours are associated with increased health risks, making these populations vulnerable to poorer health outcomes.

#### Recommendations are to:

- Continue to prioritise these wards for health interventions such as those implemented though the Healthy Towns initiative with the goal to change prevailing social norms.
- Focus resources on innovative methods of engaging the target population with local initiatives and facilities.
- Target smoking cessation and alcohol misuse interventions predominantly at White men in the areas where it is most prevalent. This group were largely identified as at the pre-contemplation stage, and therefore social marketing campaigns to raise awareness and increase intentionality within the localities should be tailored accordingly.
- Focus social marketing campaigns and interventions on improving health literacy. This could in turn improve knowledge about achieving and maintaining healthy lifestyles, and reducing risky health behaviours in the target populations.

#### Differences in health behaviours exist within and between the target communities.

The target wards are categorised as amongst the most deprived in the country, and as such are targeted by local and national policy focused on tackling health inequalities which arise as a result of social disadvantage. However, differences in health behaviours were observed both within and between the target wards, suggesting that generalised area interventions informed by local and national policy may not be accurate (and therefore not effective) as they do not reflect the complexities of individual populations. For example, significant differences were found between the Healthy Foundations segmentation profile of the lifestyle survey sample and that of the synthetic estimates for the most deprived quintiles. The Healthy Foundations model recommends using synthetic estimates to gain insight into local authority areas. However, Live for Todays and Unconfident Fatalists were over represented in the lifestyle survey and this discrepancy suggests that the instrument may lose specificity and sensitivity when applied within a localised context, and that more detailed research within the target communities is needed. A possible explanation for these differences may be because there was an over-representation of BME groups in comparison to national averages, but in line with ward profile demographics. It appears that further research is required to understand how the different characteristics of a community impact on health behaviours.

#### Recommendations are to:

- Tailor interventions to the characteristics of a target community, perhaps utilising Geographic Information Systems (GIS) in order to focus interventions more accurately.
- Design interventions to include approaches recommended by The Healthy Foundations Model for working with specific segments. For the target communities, it has been suggested that high intensity interventions are likely to be most beneficial, and effective strategies are proposed to include on-going monitoring, mentoring, evaluation, and hands-on and practical initiatives. Personalised approaches, health checks outside a health setting, tackling mental health issues and peer-led interventions such as those incorporating health trainers are identified. All these strategies have been employed in the Healthy Halifax initiative. However, it also appears that more rigorous evaluation of segment-specific interventions is required, as the assumptions underpinning the Healthy Foundations algorithms may require greater empirical testing. Rigorous evaluation of segment-specific tailored interventions will contribute further to the growing evidence base.

#### There is potential to build on existing community assets and social capital to reduce health inequalities.

Findings suggest there is clear potential to invest in existing community assets to increase social cohesion, physical activity, facilitate uptake of interventions, and build community capacity. Building resources within the communities, combined with initiatives targeted at individual communities has the potential to create more sustainable changes in reducing health inequalities.

#### Recommendations are to:

- Use information on community cohesion to develop peer-led activities and interventions, perhaps informed by qualitative research with individuals in the community who have succeeded in smoking cessation, maintaining a responsible approach to alcohol consumption, engaged in physical activities and maintained or developed healthy eating behaviours.
- Build on existing community assets such as green spaces, places of worship, neighbours, community activities and initiatives, family and friends and local facilities. This could involve, for example, using local shops and faith centres to disseminate health messages and building on such interventions implemented through the Healthy Halifax initiative.

#### Summary

The above recommendations incorporate a bottom-up community development approach alongside a top-down commissioner approach to target resources where they are most needed (see Figure 9).

#### Figure 9: Recommendations for a Healthier Halifax.



The combination of these approaches is referred to as the 'nutcracker effect' [64]. This approach is recommended by the World Health Organization [32], and the Marmot Review Fair Society, Healthy Lives [33] in tackling the social determinants of ill-health, and can be readily applied within a localised context. This approach indicates that it will also be important to integrate on-going local level research in order to increase knowledge of health behaviours and attitudes in target populations and capture changes over time.

## References

- Cross-Government Obesity Unit, Healthy weight, healthy lives: A cross-Government strategy for England, Department of Health and Department of Children Schools and Families, Editor 2008, HM Government: London. p. 1-38.
- 2. Calderdale Metropolitan Council, Calderdale JSNA 2011, 2011.
- 3. Calderdale Council, Calderdale Council Joint Strategic Needs Assessment 2008. 2009.
- 4. McCluskey, S. and A.E. Topping, Increasing response rates to lifestyle surveys: a pragmatic evidence review. Perspectives in Public Health, 2011. 131: p. 89-93.
- 5. Department of Health, Healthy Foundations: A segmentation model, 2008.
- 6. Sjostrom, M., et al. IPAQ International Physical Activity Questionnaire. IPAQ 2011 17/11/2011]; Available from: https://sites.google.com/site/theipaq/.
- 7. Altogether Better, www.altogetherbetter.org.uk. 2011.
- 8. Department of Health. 5 a day health benefits. 2011; Available from: http://webarchive.nationalarchives.gov.uk/+/ www.dh.gov.uk/en/Publichealth/Healthimprovement/FiveADay/FiveADaygeneralinformation/DH\_4002343.
- 9. Anderson, S., Health and Lifestyle Surveys, 2011, YHPHO, APHO.
- 10. Department of Health. Alcohol Misuse. 2011 07/11/2011]; Available from: http:// webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/publichealth/healthimprovement/alcoholmisuse/index.htm.
- 11. Tocque, K., Fullard, B., JMU/ NWPHO, Identifying smoking prevalence from local lifestyle surveys: Recommended standards. Tobacco Control Research Bulletin, 2004. December(2): p. 1-18.
- 12. Prochaska, J.O. and C.C. DiClemente, The Transtheoretical Approach: Crossing Traditional Boundaries of Thera py.1984, Illinois: Dorsey.
- 13. Prochaska, J.O. and C.C. DiClemente, Stages and processes of self-change of smoking: towards an integrative model of change. Journal of Consulting and Clinical Psychology, 1983. 51(3): p. 390-395.
- 14. Prochaska, J.O. and W.F. Velicer, Behavior change: the transtheoretical model of health behavior change. American Journal of Health Promotion, 1997. 12(1): p. 38-48.
- 15. Twigg, L., et al., Smoking cessation in England: Intentionality, anticipated ease of quitting and advice provision. Social Science & Medicine, 2009. 68: p. 610-619.
- 16. Improvement and Development Agency Healthy Communities Team, A glass half-full: how an asset approach can improve community health and well-being, 2010, IDeA: London.
- 17. Lindstrom & Eriksson, Salutogenesis. Journal of Epidemiology and Community Health, 2005. 59: p. 440-442.
- 18. Calderdale Call. 2009-2011; Available from: http://www.calderdale.gov.uk/council/news/calderdalecall/index.html
- 19. Calderdale Council. Ward Profiles. 2010; Available from: http://www.calderdale.gov.uk/council/statistics/wardinformation/wardprofiles/index.html.
- 20. Crosby, R.A., et al., Balancing rigor against the inherent limitations of investigating hard-to-reach populations. Health Education Research, 2010. 25(1).
- Lagarde, F. and M. Gendron, Reaching the Hard-to-Reach With Hope and Help. Social Marketing Quarterly, 2011. 17
  (2): p. 98-101.
- 22. Chaturvedi, N. and P.M. McKeigue, Methods for epidemiological surveys of ethnic minority groups. Journal of Epidemiology and Community Health, 1994. 48: p. 107-111.
- 23. Collins, G.S. and M.R. Johnson, Addressing Ethnic Diversity in Health Outcome Measurement: A Systematic and Critical Review of the Literature, 2004, Warwick University: Warwick.
- 24. Office for National Statistics, Census 2011. 2011.
- 25. Porter, S.R., M.E. Whitcomb, and W.H. Weitzer, Multiple Surveys of Students and Survey Fatigue, in New Directions for Institutional Research 2004, John Wiley & Sons. p. 63 73.

- 26. Department of Health, Healthy Towns- Early Learning Report, Health Improvement and Protection Directorate, Editor 2011: London.
- 27. Aylott, J., et al., Tackling Obesities: The Foresight Report and Implications for Local Government, 2008, Sheffield Hallam University. p. 1-64.
- 28. Batty, E., et al., Improving outcomes for people in deprived neighbourhoods: Evidence from the New Deal for Communities Programme: The New Deal for Communities National Evaluation: Final Report, Department for Communities and Local Government / Centre for Regional Economic and Social Research Sheffield Hallam University, Editor 2010, Communities and Local Government Publications: London. p. 1–98.
- 29. Brooks, C. and P. John, S., The Faith Sector in Calderdale: A Scoping Study, European Regional Business & Economic Development Unit, Editor 2009, Leeds Metropolitan University: Leeds.
- 30. The Information Centre for Health & Social Care, Statistics on obesity, physical activity and diet: England, 2010, 2010, NHS.
- 31. The Marmot Review, Fair Society, Healthy Lives, 2010, Strategic Review of Health Inequalities in England post-2010.
- 32. World Health Organisation, Closing the gap in a generation: Health equity through action on the social determinants of health, Commission on Social Determinants of Health, Editor 2008, World Health Organisation.
- 33. Health Survey for England 2009, Health and Lifestyles. The Information Centre for Health and Social Care, 2010.
- 34. Mulgan, G., Influencing Public Behaviour to Improve Health and Wellbeing An Independent Report. 2010.
- 35. Pearce, J., R. Barnett, and G. Moon, Sociospatial inequalities in health-related behaviours: Pathways linking place and smoking. Progress in Human Geography, 2012. 36(1): p. 3-24.
- 36. Malterud, K. and K. Ulriksen, Obesity, stigma, and responsibility in health care: A synthesis of qualitative studies. International Journal of Qualitative Studies in Health and Well-being, 2011. 6.
- 37. Dauphinot, V., et al., New obesity body mass index threshold for self-reported data. Journal of Epidemiology and Community Health, 2008. 63: p. 128-132.
- 38. Gatineau, M. and S. Mathrani, Ethnicity and obesity in the UK. Perspectives in Public Health, 2011. 131: p. 159-160.
- 39. Berkman, N.D., T.C. Davis, and L. McCormack, Health Literacy: What Is It? Journal of Health Communication: International Perpectives, 2010. 15(S2): p. 9-19.
- 40. Department of Health, The Healthy Foundations Lifestages Segmentation Research Report No.1: Creating the segmentation using a quantitative survey of the general population of England, 2011, DH: London.
- 41. Calderdale Council, Analysis of the 2010 Indices of Deprivation: A briefing paper by the Corporate research and Consultation Team, 2011, Calderdale Council: Calderdale.
- 42. Department of Health, The Healthy Foundations Lifestage Segmentation Research Report No. 2: The qualitative analysis of the motivation segments, 2011, DH: London.
- 43. Scholes, S., M. Bajekal, and K. Pickering, Synthetic estimation of healthy lifestyles indicators:User guide, 2005, National Centre for Social Research,: Prepared for the Department of Health,.
- 44. Lader, D. and M. Steel, Drinking: adult's behaviour and knowledge, 2010, Office for National Statistics: Office for Public Sector Information.
- 45. Bush, J., et al., Understanding influences on smoking in Bangladeshi and Pakistani adults: community based, qualitative study. BMJ Clinical Research, 2003. 326(7396): p. 962–965.
- 46. Calderdale Substance Misuse Partnership, A Strategic Approach to Tackling the Harms of Alcohol, 2010-2013.
- 47. Robinson, S. and H. Harris, Smoking and drinking among adults, 2009, S. Dunstan, Editor 2009, Office for National Statistics.
- 48. Lader, D., Smoking-related Behaviour and Attitudes, 2008/2009, 2009, Office for National Statistics:Office for Public Sector Information.
- 49. Bell, K., et al., Smoking, stigma and tobacco 'denormalization': Further reflections on the use of stigma as a public health tool. A commentary on Social Science & amp; Medicine's Stigma, Prejudice, Discrimination and Health Special Issue (67: 3). Social Science & amp; Medicine, 2010. 70(6): p. 795-799.

- 50. Thomson, L., J. Pearce, and J.R. Barnett, Moralising geographies: Stigma, smoking islands and responsible subjects. Area, 2007. 39(5): p. 508-512.
- 51. North of England Tackling Illicit Tobacco for Better Health Programme, North of England Illicit Tobacco Survey, 2009.
- 52. NICE. Four commonly used methods to increase physical activity. 2006; Available from: http://www.nice.org.uk/ Search.do?searchText=physical+exercise+2006&newsearch=true#/search/?reload.
- 53. NHS, National Health Survey for England, 2010, NHS: The Information Centre for Health and Social Care.
- 54. YHPHO, Mapping the Wider Determinants of Health: Calderdale Profile, 2011.
- 55. Coombes, E., P. Jones, and M. Hillsdon, The relationship of physical activity and overweight to objectively measured green space accessibility and use. Social Science & Medicine, 2010. 70: p. 816-822.
- Lachowycz, K. and A.P. Jones, Greenspace and obesity: a systematic review of the evidence. Obseity Reviews, 2011.
  12: p. e183-e189.
- 57. Lee, A.C.K. and R. Maheswaran, The health benefits of urban green spaces: a review of the evidence. Journal of Public Health, 2010. 33(2): p. 212-222.
- 58. Maas, J., et al., Green space, urbanity, and health: how strong is the relation? J Epidemiol Community Health, 2006. 60: p. 587-592.
- 59. Ghouri, N., Health fair in a mosque: putting policy into practice. Journal of the Royal Institute of Public Health, 2005. 119: p. 197-201.
- 60. Coulter, A., Engaging communities for health improvement: A scoping study for the Health Foundation, 2009, The Health Foundation. p. 1-47.
- 61. Kretzmann, J.P. and J.L. McKnight, Building Communities from the Inside out: A path Toward Finding and Mobilizing a Community's Assets, 1993, Evanston: IL: Institute for Policy Research. p. 1–11.
- 62. Mathie, A. and G. Cunningham From clients to citizens: Asset-based community development as a strategy for community-driven development. Occasional Paper Series, 2002. 4, 1–21.
- 63. McCluskey, S., et al., "My neighbours all look out for me as I try to do". Important 'community assets' for health: findings from the Healthy Halifax Lifestyle Survey, in International Conference on Assets for Health and Wellbeing across the Life Course2011, University of Huddersfield,: British Library Conference Centre, London.
- 64. Baum, F., Cracking the nut of health equity: top down and bottom up pressure for action on the social determinants of health. Promotion and Education, 2007. 14: p. 90-95.

# **APPENDIX**



## **Appendix A** Healthy Halifax Lifestyle Survey

Good morning/afternoon. My name is ...... from Spirul, on behalf of the University of Huddersfield, NHS Calderdale and Calderdale Council [SHOW ID]. We are conducting a survey with Halifax residents as part of the nationally funded Healthy Towns Programme whose aim is to make Halifax a healthy town in which to live, work and play. As part of this initiative, the UK Government has invested around £2 million into projects which benefit over 8000 Halifax residents.

We would like to ask you some simple questions about health and lifestyle. We are conducting this survey in order to understand what residents in Calderdale enjoy, what is important to you, what support you may need and how life could be improved for local people. This survey will take about 10 to 15 minutes to complete. Please could you spare a few minutes to answer some questions? You will have the opportunity to be entered into a prize draw and win a Nintendo Wii Fit console.

All the information collected will be held securely and confidentially at the University of Huddersfield. All data collected will be anonymous and we will not share your answers with any other organisations. All of Spirul's surveys are conducted under the Market Research Society's Code of Conduct.

You will have access to the final results via the Calderdale Call magazine, ward forums and the repository at the University of Huddersfield.

#### **Q0** Before we start, can I just check that you live in one of the following areas of Halifax? SEE SHOW CARD A-E FOR AREA DETAILS/ DO NOT READ OUT/ SINGLE CODE ONLY

Town	SHOW CARD A
Illingworth & Mixenden	SHOW CARD B
Park	SHOW CARD C
Ovenden	SHOW CARD D
Elsewhere	THANK & CLOSE

### SECTION A: GETTING TO KNOW YOU

#### QA1 Here are some things that other people have said. Please tell me how much you agree or

#### disagree with each one?

READ OUT/ SINGLE CODE FOR EACH

	Disagree	Disagree	Disagree	Neither	Agree	Agree	Agree
	strongly	_	slightly	agree nor	slightly	-	strongly
				disagree			
I feel good about myself							
I get a lot of pleasure from							
taking risks							
I generally focus on the here							
and now rather than worry							
about the future							
I learn from my mistakes							

QA2 Here are some things that people have said they would like to have over the course of their lives. On a scale of 1 to 7, where 1 is not important and 7 is very important, how important is each

#### one to you personally?

READ OUT/ SINGLE CODE FOR EACH

	Not important <b>1</b>	2	3	4	5	6	Very important <b>7</b>
To have money, wealth and pos- sessions							
To have an image that others find appealing							

## **QA3** How much do you agree or disagree with each of the following? READ OUT/ SINGLE CODE FOR EACH

	Disagree strongly	Disagree	Disagree slightly	agree nor	Agree slightly	Agree	Agree strongly
				disagree			
Following a healthy lifestyle is							
an effective way to reduce my chances of becoming ill							
lf you don't have your health, you don't have anything							
There is nothing more							
important than good health							
I am very involved in my health							
l am in control of my own health							
The main thing which affects my health is what I personally do							
If a person is meant to get ill, it doesn't matter what a doctor tells them to do, they will get ill anyway							
I intend to lead a healthy							
lifestyle over the next 12 months							

QA4 For you, would leading a healthy lifestyle be difficult or easy? Please rate how difficult or easy leading a healthy lifestyle would be for you on a scale of 1 to 7, where 1 is very difficult and 7 is very easy.

READ OUT/ SINGLE CODE ONLY

For me, leading a healthy lifestyle would be	Extremely difficult 1	2	3	4	5	6	Extremely easy 7
--	-----------------------------	---	---	---	---	---	------------------------

# QA5 How much control do you believe you have over whether or not you lead a healthy lifestyle over the following year? Please rate your level of control on a scale of 1 to 7, where 1 is no control and 7 is complete control.

READ OUT/ SINGLE CODE ONLY

For me, leading a healthy lifestyle would be	No control 1	2	3	4	5	6	Complete control 7	
--	-----------------	---	---	---	---	---	--------------------------	--

#### QA6 For you, would leading a healthy lifestyle be not enjoyable or enjoyable? Please rate how enjoyable leading a healthy lifestyle would be for you on a scale of 1 to 7, where 1 is not enjoyable and 7 is enjoyable.

READ OUT/ SINGLE CODE ONLY

	Not enjoyable <b>1</b>	2	3	4	5	6	Enjoyable <b>7</b>
For me, leading a healthy lifestyle would be							

QA7 Which of the following best describes your view on the statement - "If I don't lead a healthy lifestyle my health could be at risk..."

READ OUT/ SINGLE CODE ONLY

In the next 12 months In the next few years In the next 10-20 years Much later in my life Not at all

## QA8 Compared with other people of your age, how likely do you think it is that you will get seriously ill at some point over the next few years?

READ OUT SINGLE CODE ONLY

I am much more likely to get seriously ill than other people of my age

I am a little more likely

No more or less likely

I am a little less likely

I am much less likely to get seriously ill than other people of my age

### SECTION B: YOUR PHYSICAL ACTIVITY

We would now like to ask you about the time you spend doing different types of physical activity in a typical week.

**QB1** During the last 7 days, how much time did you spend sitting on a typical week day? READ OUT/ SINGLE CODE ONLY

Less than 5 hours Between 5 and 8 hours Between 8 and 11 hours Between 11 and 13 hours Over 13 hours

**QB2** During the last 7 days, on how many days did you walk for at least 10 minutes? WRITE IN NUMBER OF DAYS OR 0 DAYS

Number of days



No days

**QB3** How much time did you usually spend walking on one of those days? READ OUT/ SINGLE CODE ONLY

Less than 20 minutes

More than 20 but less than 30 minutes

More than 30 but less than 40 minutes

More than 40 minutes but less an hour

Over an hour

WRITE IN AMOUNT OF TIME OVER AN HOUR

Next, we're going to ask you about moderate physical activity that you have done in the last 7 days. Moderate physical activities are activities that require moderate physical effort, make you breathe a little harder or sweat a little, e.g. gardening, steady cycling and gentle aerobics.

**QB4** During the last 7 days, on how many days did you do moderate physical activities? WRITE IN NUMBER OF DAYS OR 0 DAYS

Number of days	
No days	GO TO QB6

**QB5** How much <u>time</u> did you usually spend doing moderate physical activities on one of those days on one of those days? READ OUT/ SINGLE CODE ONLY

Less than 20 minutes

More than 20 but less than 30 minutes

More than 30 but less than 40 minutes

More than 40 minutes but less an hour

Over an hour

WRITE IN AMOUNT OF TIME OVER AN HOUR	

Next, we're going to ask you about vigorous physical activity that you have done in the last 7 days. Vigorous physical activities are activities that require hard physical effort and make you sweat or breathe much harder than normal, e.g. running or jogging, playing squash, heavy lifting and playing football.

**QB6** During the last 7 days, on how many days did you do vigorous physical activities? WRITE IN NUMBER OF DAYS OR 0 DAYS

Number of days



No days

**QB7** How much <u>time</u> did you usually spend doing moderate physical activities on one of those days ? READ OUT/ SINGLE CODE ONLY

Less than 20 minutes More than 20 but less than 30 minutes More than 30 but less than 40 minutes More than 40 minutes but less an hour Over an hour

WRITE IN AMOUNT OF TIME OVER AN HOUR

#### **QB8** Please tell us the type and amount of physical activity involved in your <u>work</u>? READ OUT/ SINGLE CODE ONLY

I am not in employment (e.g. retired, retired for health reasons, unemployed, full time carer)

I spend most of my time at work sitting (e.g. at a desk in an office) I spend most of my time at work standing or walking but my work does not require much intense

physical effort (e.g. shop assistant, security guard, child minder) My work involves definite physical effort including handling of heavy objects and use of tools

(e.g. plumber, electrician, carpenter, cleaner, hospital nurse, gardener, postal delivery worker) My work involves vigorous physical activity including handling of very heavy objects

(e.g. scaffolding, construction worker, refuse collector)

## QB9 Please read the statements on the show card and indicate on the sliding scale the point which best describes your feelings about physical activity?

SHOW CARD E/ READ OUT/ SINGLE CODE ONLY

I wish I didn't have to do physical activity, but I know it's important for my health						As well as being important for my health, physical activity is something I enjoy
1	2	3	4	5	6	7

**QB10** The following are a set of statements relating to why some people may find it difficult to take part in a physical activity. Please tell me all those that apply to you? READ OUT/ MULTI CODE

I find it difficult to find time It's difficult to get childcare It's too expensive I'm not really interested in physical activity There is nothing in my local area which appeals to me There are few single sex activities in my area It is difficult for me to get to activities (e.g. travel problems, facilities too far away) Local courses and facilities are not adequately adapted for those with a disability My health isn't good enough I feel uncomfortable going into a new environment I feel self conscious about doing physical activity I worry about my personal safety and/or sexual harassment My friends and family do not encourage me to take part in physical activity Other WRITE IN OTHER

**QB11** Which of the following have you used for exercise? READ OUT/ MULTI CODE

Council run leisure centre Private gym Sports club Parks or walking routes Cycling routes Community venue (e.g. village/school hall) None of these

#### **QB12 Would you consider using any of the following to do exercise?** READ OUT/ MULTI CODE

Council run leisure centre Private gym Sports club Parks or walking routes Cycling routes Community venue (e.g. village/school hall) None of these

### **SECTION C: YOUR EATING HABITS**

QC1 On average, how many portions of FRUIT do you eat a day? WRITE IN NUMBER OF PORTIONS

Number of portions



QC2 On average, how many portions of VEGETABLES do you eat a day (not including potatoes)? WRITE IN NUMBER OF PORTIONS

Number of portions



**QC3** In a normal week, how often do you eat a meal that has been prepared and cooked from basic ingredients (e.g. Shepherd's Pie made starting with raw mince and potatoes)? DO NOT READ OUT/ SINGLE CODE ONLY

Never Less than once a week Once a week 2-3 times a week 4-6 times a week Daily

## QC4 The following is a list of things that some people find important when it comes to food. Please rank them in order of their importance to you (1 being the most important, 2 the second most

#### important and so on).

SHOW CARD F/ READ OUT/ SINGLE CODE ONLY FOR EACH/ RANK FROM 1 TO 5

	1	2	3	4	5
Choosing food products and dishes that you enjoy eating					
Eating a healthy diet					
Keeping your spending on food as low as possible					
Eating your meals in the company of other people					
Choosing food products and dishes that are quick and easy to prepare					

#### QC5 On a scale of 1 to 7, where 1 is having no confidence at all and 7 is extremely confident, how

#### confident are you about ...?

READ OUT/ SINGLE CODE FOR EACH

	No confidence						Very confident
	1	2	3	4	5	6	7
Choosing healthy food when shopping							
Being able to cook from basic ingredients							
Following a simple recipe							
Eating healthily							
Growing your own food							

#### QC6 How much do you agree or disagree with each of the following statements?

READ OUT/ SINGLE CODE FOR EACH

	Disagree strongly	Disagree	Neither agree nor disagree	Agree	Agree strongly
I enjoy putting effort and care into the food I eat					
I enjoy eating healthy food					
Healthy food often tastes nicer than unhealthy food					

#### QC7 Are you able to buy healthy food in your area easily?

DO NOT READ OUT/ SINGLE CODE ONLY

Yes	GO TO QC9
No	
Not sure	GO TO QC9

### **QC8** You said that you are not able to buy healthy food in your area. Please tell us which of the following reasons apply to you? READ OUT/ MULTI CODE

There are no healthy shops in my area The range of healthy food in local shops is limited Healthy food that is available locally is too expensive I need to travel to get to a supermarket I don't have car It is easier and more affordable to buy take away and convenience food in my area I find it hard to get my family to eat healthy food I haven't got time to prepare and cook healthy food I don't like healthy food My family doesn't cook healthy food for me Other

WRITE IN OTHER \_\_\_\_

### **SECTION D: ALCOHOL**

#### QD1 Do you drink alcohol?

DO NOT READ OUT/ SINGLE CODE ONLY

Yes

No GO TO SECTION E

#### QD2 In each of the last 7 days, how much of the following did you drink? WRITE IN NUMBER PER DAY FOR EACH

	Mon	Tues	Weds	Thurs	Fri	Sat	Sun
Number of ½ pints of beer, lager or cider							
Number of small glasses of wine or sherry (1 large glass of wine = 2 small							
Number of single pub measures of spirit (vodka, gin, Bacardi etc)							
Number of bottles of alcopops or premixed drinks (e.g. WKD)							

### SECTION E: SMOKING

QE1 Have you ever smoked cigarettes, cigars or smoked/ used other tobacco products (e.g. chewing tobacco)? DO NOT READ OUT/ SINGLE CODE ONLY

Yes

GO TO SECTION F No

QE2 Do you smoke now? DO NOT READ OUT/ SINGLE CODE ONLY

Yes

GO TO SECTION F No

#### QE3 Which of these best describes you? READ OUT/ SINGLE CODE ONLY

I smoke/ use tobacco products daily

I smoke/ use tobacco products occasionally, but not every day

#### QE4 Where do you smoke/ use tobacco products?

DO NOT READ OUT/ MULTI CODE

In my house (just in one room)

In my house (all rooms)

Outside my house (garden or doorstep)

At my workplace (outside in a smoking shelter)

Other

WRITE IN OTHER

**QE5 Where do you buy your cigarettes/ tobacco products?** DO NOT READ OUT/ MULTI CODE

From a local shop

From the supermarket

From friends

From a colleague/ friend at work

**QE6** Have you thought about giving up smoking/ using tobacco products? DO NOT READ OUT/ SINGLE CODE ONLY

Yes

No GO TO SECTION F

**QE7** Thinking about quitting smoking/ using tobacco products. When do you intend to quit? READ OUT/ SINGLE CODE ONLY

Next 3 weeks

Next 6 weeks

Next 12 weeks

### **SECTION F: ABOUT YOU**

To ensure that we are getting the views of a cross section of people it is important that we ask you a few questions about yourself. As with all the questions, your answers will be completely confidential.

QF1 Are you male or female? DO NOT READ OUT/ CODE BY OBSERVATION

Male

Female

QF2 How tall are you? WRITE IN FEET & INCHES OR METRES & CENTIMETRES

Feet



Inches



OR

Metres

Centimetres



#### QF3 How much do you weigh?

WRITE IN STONES & POUNDS OR KILOGRAMS & GRAMS

Stone

Kilograms

Pounds

Grams

OR





QF4 How old are you?

READ OUT/ SINGLE CODE ONLY

18 to 24	55 to 64
25 to 34	65 to 74
35 to 44	75 and over

45 to 54

### QF5 What is your ethnic group?

DO NOT READ OUT/ SINGLE CODE ONLY

White British
White Irish
Other White background
Mixed-White & Asian
Mixed-White & Black African
Mixed-White & Black Caribbean
Asian or Asian British-Indian
Asian or Asian British-Pakistani
Asian or Asian British-Bangladeshi
Any other Asian background

#### Arab

Black or Black British-Caribbean Black or Black British-African Any other black background Central/Eastern European Gypsy/Traveller/Roma Any other ethnic group Prefer not to say

#### **QF6 What is your postcode?** WRITE IN

### QF7 What is your annual household income?

DO NOT READ OUT/ SINGLE CODE ONLY

£0-£4,999	£35,000-£39,999
£5,000-£9,999	£40,000-£44,999
£10,000-£14,999	£45,000-£49,999
£15,000-£19,999	£50,000-£54,999
£20,000-£24,999	£55,000-£59,999
£25,000-£29,999	More than £60,000
£30,000-£34,999	Prefer not to say

**QF8** Do you consider yourself to have a physical disability (defined as "a physical, sensory or mental impairment which has, or had a substantial and long-term adverse effect on a person's ability to carry out normal day to day activities")? DO NOT READ OUT/ SINGLE CODE ONLY

Yes

No GO TO QF10

QF9	f you do you consider yourself to have a physical disability, please tell us what impairment/s
you ł	ave?

DO NOT READ OUT/ SINGLE CODE ONLY

Physical mobility
Learning disability
Visual
Mental health condition
Hearing
Long standing illness or condition (e.g. cancer, diabetes, HIV etc.)
Other
Prefer not to say
WRITE IN OTHER
QF10 Do you consider yourself as belonging to any religion? DO NOT READ OUT/ SINGLE CODE ONLY
Islam
Islam Buddhism
Buddhism
Buddhism Christianity (including Catholic, Protestant or any Christian denomination)
Buddhism Christianity (including Catholic, Protestant or any Christian denomination) Judaism
Buddhism Christianity (including Catholic, Protestant or any Christian denomination) Judaism Sikhism
Buddhism Christianity (including Catholic, Protestant or any Christian denomination) Judaism Sikhism Hinduism

## **QF11 What is your sexual orientation?** DO NOT READ OUT/ SINGLE CODE ONLY

Heterosexual/ Straight
Gay man
Prefer not to say

Lesbian

Bisexual

### **SECTION G: YOU & YOUR COMMUNITY**

The following questions are designed to help us get a picture of how you feel about your family, friends, community and neighbourhood.

**QG1** How often do you attend, take part in or help with activities organised in your local area (e.g. **Residents Association meetings, faith group meetings, mums & tots, voluntary activities)?** DO NOT READ OUT/ SINGLE CODE ONLY

At least once a week	Once every year
At least once a month	Less than once a year
At least once every three months	Never
At least once every six months	Don't know

## **QG2** How strongly do you feel you belong to your immediate neighbourhood or local area? READ OUT/ SINGLE CODE ONLY

Very strongly	Not very strongly
Strongly	Not strongly at all

### QG3 How much do you agree or disagree with each of the following statements about your

#### community?

READ OUT/ SINGLE CODE FOR EACH

	Disagree strongly	Disagree	Neither agree nor disagree	Agree	Agree strongly
In general, I think that the majority of people in my community can be trusted					
In general, I think that the majority of people in my community get along with					
In general, I think that the majority of people in my community can be trusted					
There are people in my life that really care about me					
I regularly meet socially with friends and relatives					
I find it difficult to meet with people who share my interests or hobbies					

**QG4** In an emergency (e.g. being locked out of your house) is there someone locally you could ask for help? DO NOT READ OUT/ SINGLE CODE ONLY

Yes

No

Maybe

**QG5** If you needed help at short notice (e.g. with baby sitting or moving heavy furniture) is there someone locally you could call upon? DO NOT READ OUT/ SINGLE CODE ONLY

Yes

No

Maybe

QG6 Overall, how satisfied or dissatisfied are you with your neighbourhood as a place to live? Please rate your neighbourhood as a place to live on a scale of 1 to 7, where 1 is extremely dissatisfied and 7 is extremely satisfied. READ OUT/ SINGLE CODE ONLY

	Extremely dissatisfied						Extremely satisfied
Your neighbourhood as a place to live	1	2	3	4	5	6	7

QG7 Are there any things in your community that contribute to your general health and feeling good (e.g. the local church or place to worship, Community centre, green spaces, people or community groups) that you would like to tell us about? WRITE IN BELOW

**QG8** Please provide us with a contact phone number, if you would like to be entered into the prize draw to win a Nintendo Wii Fit, so that the University of Huddersfield can contact you by phone if you win. WRITE IN BELOW

Phone Number:

CLOSE/ THANK PARTICIPANT/ HAND OUT FLYER WITH CONTACT DETAILS IF REQUIRED Thank you very much for your time and co-operation. I'll just confirm that my name is ...... from Spirul on behalf of the University of Huddersfield, NHS Calderdale and Calderdale Council and this interview has been conducted within the Code of Conduct of the Market Research Society.

**Interviewer declaration:** I hereby declare that this questionnaire has been completed within the MRS Code of Conduct and in accordance with the instructions supplied to me. I have carefully checked the questionnaire and am aware that it is subject to quality control procedures.

Interviewers name:	Signature:	Date:



University of Huddersfield Queensgate Huddersfield HD1 3DH UK \_\_\_\_\_ Telephone +44 (0) 1484 473974 E-mail a.e.topping@hud.ac.uk www.hud.ac.uk

