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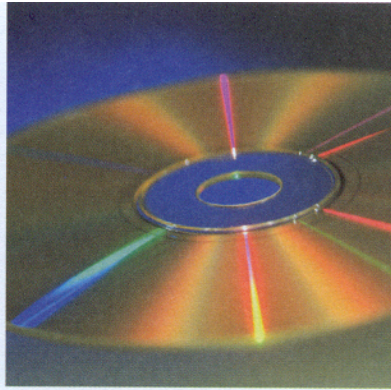
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First Report of Physical Activity and Obesity from the Kent 2005 Survey of Health and Lifestyle

**Dr Ann Palmer, Linda Jenkins and
Charlotte Hastie**



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November 2006

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**First Report of Physical Activity and Obesity from
the Kent 2005 Survey of Health and Lifestyle**

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University of Kent**

**Commissioned by:
Kent County Council**

Centre for Health Services Studies (CHSS)

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Researchers in the Centre attract funding of nearly £1 million a year from a diverse range of funders including the Economic and Social Research Council, Medical Research Council, Department of Health, NHS Health Trusts and the European Commission.

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Executive Summary

The Kent 2005 Survey of Health and Lifestyle was completed by 5800 people, age 16 and above, sampled from the GP registers in Kent. While including a range of questions on health and lifestyle, the 2005 survey focused particularly on physical activity in order to provide a baseline for KCC to monitor progress towards PSA targets.

The Department of Health recommends that adults undertake at least moderate physical activity for at least 30 minutes on five or more days a week. Moderate physical activities are described as things that cause some increase in breathing or heart rate and a feeling of increased warmth. Physical activity is an important factor in maintaining a healthy body weight. The Body Mass Index (BMI) is measured by the ratio of weight divided by height squared, and obesity is defined by a BMI of 30>. There have been national targets over the last decade to halt the year on year increase in the proportion of the population classified as obese.

The Kent 2005 survey was sent out by post to one in fifty adults, and after three reminder letters, got a 27% response rate. As is usual in postal surveys of this type, the best response rates were achieved from people in their middle years, with younger people, especially men under 45, being less likely to complete the questionnaire.

Survey responses indicated increasing levels of obesity in Kent in 2005 (compared to results from a previous survey in 2001), with 14.3% of men and 15.8% of women estimated as having a Body Mass Index (BMI) greater than 30. These percentages persisted across most age groups, apart from the youngest and oldest. For example, there were fewer obese men under 30 and women under 20, and fewer obese men age 70 and over and women age 80 and over.

Nearly three-quarters of adults completing the survey perceived themselves as being physically active, a response spread across men and women and into old age. Around one in four of the survey respondents was exercising at the recommended moderate activity level. This level of exercise was maintained for both sexes until age 65, when average levels of activity decreased, especially for women age 75 and over.

Comparing results in 2005 with the Kent & Medway survey in 2001, there was a large increase in the number of people taking recommended levels of moderate exercise. The increase was most marked for women under 40 years old.

The most common physical activities for both men and women were walking (including walking to work), workplace activity, housework and manual labour. Although some exercised for longer periods of up to one hour, this was usually done once a week or less often. A small number of people undertook vigorous sports and activities, less than 5% for each of the activities the survey asked about. Pedometers were worn by around 5% of respondents.

Fewer than one in five respondents had received advice on physical activity. Lack of time and motivation prevented people from taking more exercise, and for women lack of money was an important factor. Lack of transport and lack of available facilities were barriers for no more than 10% of respondents.

Some factors were associated with lack of exercise and obesity. For example body weight and general health were associated with levels of activity (people with a high body mass index were less likely to undertake recommended levels of moderate activity, as were people who rated their health as 'poor'), and obesity was associated with long-standing illness or disability (over half of the people with a BMI of 30+ reporting a long-standing illness or disability).

Context

The Chief Medical Officer in his annual report 2002 identified the growing concern about the size of the problem of obesity in England. It is well recognised that being overweight and obesity increase the risk of this country's biggest killer diseases - coronary heart disease and cancer - as well as diabetes, high blood pressure and osteoarthritis.

Physical Activity is important in maintaining a healthy body weight. The Health Development Agency provides evidence for what works; the Department of Health has recommended :-

'at least 30 minutes physical activity on five or more days a week, of at least moderate intensity – similar to brisk walking. Activity can be in bouts of 10-15 minutes allowing for accumulation throughout the day; young people should participate in physical activity of at least moderate intensity for one hour per day'¹.

Choosing Health² identifies the following information about physical activity:

- 6 out of 10 men and 7 out of 10 women are not active enough to benefit their health
- 4 out of 10 boys and 6 out of 10 girls are not meeting the recommended hour a day physical activity for children
- physical activity decreases with age: just over 7 out of 10 men and 8 out of 10 women aged 75 and above are inactive
- outside work, people of higher socio-economic status take part in more physical activity, i.e. leisure activity. For example, rates of walking are 67% higher in social class I compared with social class 5.
- In both men and women in all age groups, low educational attainment predicts higher levels of inactivity
- In the 25 years between the National Travel Surveys 1975-76 and 1999-2001 total miles travelled per year on foot and by bicycle both fell by 26%

¹ At least five a week: Evidence on the impact of physical activity and its relationship to health. A report from the Chief Medical Officer. 2004.

http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4080994&chk=1FtIOf

² DH. Choosing Health: Making Healthy Choices Easier.

http://195.33.102.76/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPAmpGBrowsableDocument/fs/en?CONTENT_ID=4097491&chk=KPBy7H

Sport England has published guidance for local authorities for Sport and Physical Activity in 2nd Generation Public Service Agreements³, developed in partnership with the Office of the Deputy Prime Minister and DCMS. Roger Draper, Chief Executive of Sport England, said:

“Sport can improve health, educational attainment, boost local economies and reduce crime. These guidelines help us to communicate these vital messages to local authorities and really show them how sport can change communities for the better.”

Setting the PSA Target for Exercise

The Kent and Medway Health and Lifestyle survey carried out in 2001 found that more men than women were taking regular exercise; People surveyed were asked :-

‘On average, how often do you undertake any physical activity which lasts 30 minutes or more?’

19% of men who were surveyed were exercising 3-4 times a week and 20% 5 times a week compared to 30% of women who exercise 3 or more times a week. 41% of men aged 75 and over were still exercising 3 or more times a week, this compared to only 25% of women.

The 2001 survey was heavily weighted towards people aged over 75 and further analysis demonstrates decreasing activity to the age of 50-54, but then an increase in older men to 18% and women to 30% exercising for 30 minutes 5 times a week at age 65-69.

Both men and women of normal weight are exercising more frequently than those both under and overweight. Fewer men and women exercising five times a week had a BMI over 30 than those who did not exercise, except for women aged 25-34 who possibly were exercising to lose weight; men aged 35-64 could also be exercising to lose weight.

Kent has taken exercise as the key to monitoring progress towards a healthier Kent; exercise is key to achieving a population who are less obese, but is not alone, and in measuring these targets it will be important to ensure that other factors such as smoking, diet, mode of travel to work, are also monitored.

³ Sport and Physical Activity in 2nd Generation Local Public Service Agreements: Guidance Notes, November 2004. http://www.sportengland.org/text/sport_and_physical_activity_in_2nd_generation_lpsa_nov_04.pdf

Discussions with Kent County Council, Department of Health and the Office of Deputy Prime Minister have identified the importance of measuring how many people are undertaking at least moderate activity (Appendix A) five times a week. The survey will aim to measure the type of activity people undertake and how this changes by age and sex, geography, access and personal circumstances.

Kent 2005 Survey

This survey is being used to set a baseline for the Kent PSA Target, to demonstrate the change in physical activity over the coming three years and the effect on obesity in the county.

A postal survey of 22861 people across Kent was carried out. The sampling frame was the GP registration list from the Kent Primary Care Agency. Names, addresses, date of birth and NHS number for patients aged 16 and over registered with the Kent Primary Care Agency were downloaded and a one in fifty sample obtained electronically.

The people in the derived sample were sent a postal questionnaire together with the information sheet (printed on the inside cover of the questionnaire) and a stamped addressed envelope for returning the questionnaire. Non-responders at four weeks were sent a reminder postcard. Further contact was made with non-responders after six weeks when they were sent another questionnaire (after Christmas), and again after 8 weeks when they were sent a further reminder post card.

The questionnaire has also been available for completion on-line or in downloadable form on the CHSS computer, through a web-site set up for the purpose and accessible through links on KCC, LA, NHS web-sites. Very few people responded this way.

Who is in the Survey?

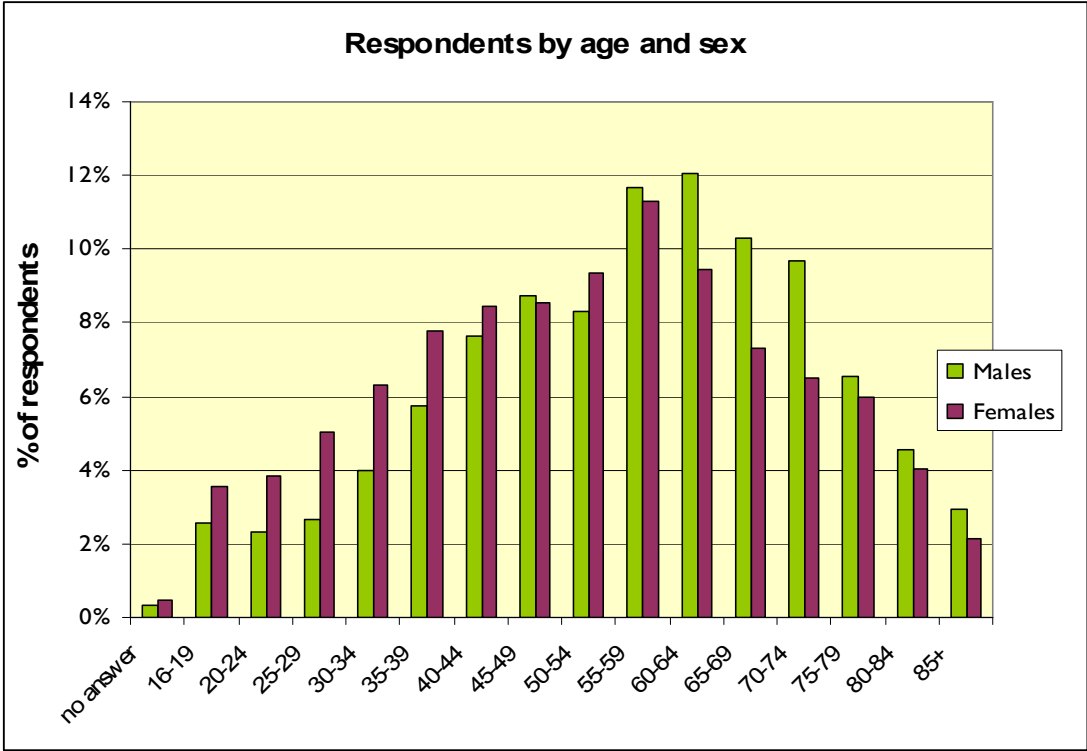
The response was 27% (5800 completed returns from 22861 handed out, adjusting for those who had died, moved away and to whom the survey was not delivered). A breakdown is in Table I.

Table I
Analysis of non-responders to the survey

Reason for not responding	No	%
Died	53	0.23%
Incapable, too ill, too old	143	0.63%
Moved away	50	0.22%
No response	14943	65.36%
Post Office return	1065	4.66%
Refusal, blank	807	3.53%
Complete	5800	25.37%
Total	22861	100.00%

5800 people in Kent responded to the survey; 66 (1.1%) of these did not give their sex and 86 (1.5%) did not give their age; 63 declined to give either age or sex; 8 males and 15 females did not give their age. There are 5711 respondents who gave both age and sex and in some analyses the people who did not respond to age and/or sex have been excluded.

Figure I

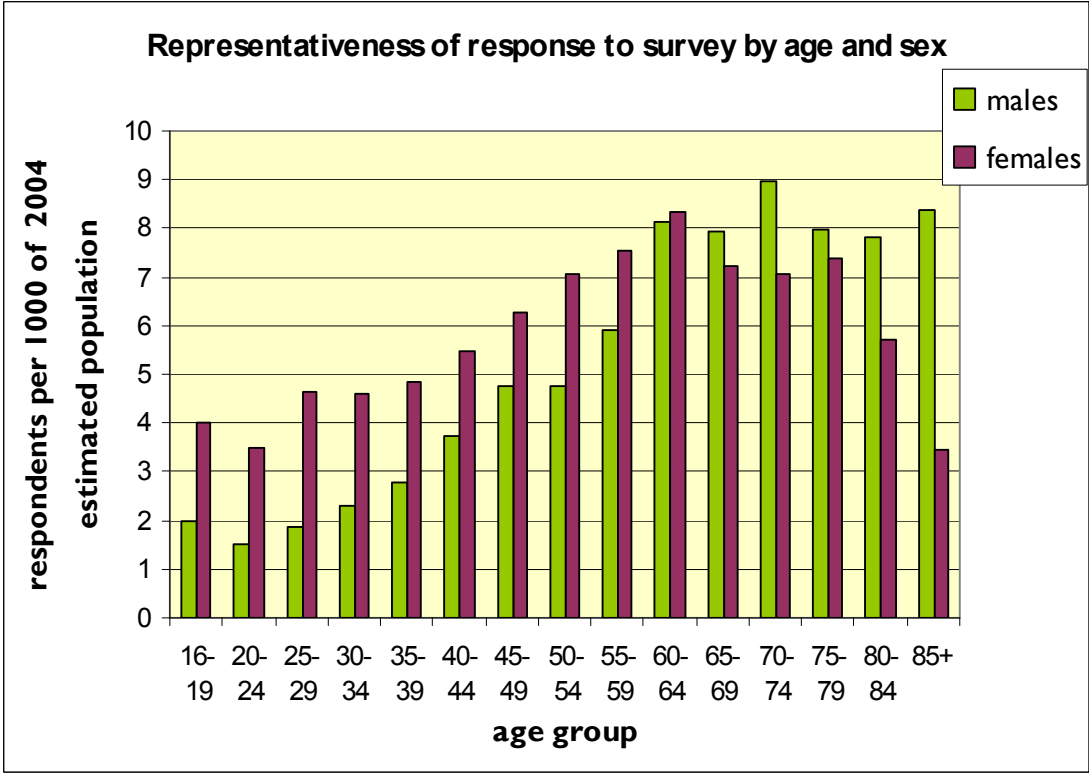


There are estimated to have been 1,077,421 people in Kent in 2004; this includes a bulge in the population aged 35-45 and aged 55-59. There are fewer people in the younger age groups (see Appendix B). Respondents are older, increasing steadily in numbers to age 60-69 and then falling off again (Figure 1). The number of women exceeded men until the age of 44, then from age 60 the number of men exceeded women until the age of 85+.

In this survey, women were better represented up to the age of 59; from this age onwards men were better represented than women (Figure 2). However the survey is more representative of older people than younger people and of young women than of young men, and older men than of older women. In terms of the distribution of responders, the representation of women does not quite mirror that of the survey population distribution and exceeds that of men to the age of 64 after which men are better represented.

The distribution of respondents may be affected by the fact that although women are more likely to live longer than men they are also more likely to be chronically ill (and therefore less likely to be able complete a questionnaire especially as this one was particularly long).

Figure 2



The survey is also more representative of married (6.9/1000), separated or divorced (4.6/1000) and widowed (5.4/1000) people than of single or never married people (2.8/1000) ; this fits with the finding that older people are better represented because older people are more likely to be currently married or widowed. Men in the survey were more likely to be married and less likely to be widowed (Table 2).

Most respondents aged under 25 were still single (96% of men and 86% of women); in the age group 25-44 72% of men and 71% of women were married.

At 45-64 81% of men and 77% of women were married; by 65-74 85% of men but only 62% of women were married.

70% of men aged 75 and over were still married and 23% were widowed, compared to only 33.5% of women who were still married and 54% who were widowed reflecting the tendency for women to marry older men and for men to die younger than women (Appendix C).

Table 2
Marital Status of responders

Marital Status	Males		Females	
Single	332	13.7	470	14.2
Married or living as married	1810	74.6	2093	63.3
Widowed	123	5.1	406	12.2
Divorced or separated	158	6.5	334	10.1
No Answer	4	.2	4	.1
Total	2427	100.0	3307	100.0

Obesity

People were asked to provide their weight, height and waist measurement, thus the survey has relied on self reporting and suffers the usual expected bias when obese people tend to under-estimate their weight and under-weight people tend to over-estimate. Height and weight were used to calculate Body Mass Index⁴

Body Mass Index is missing for 4.6% of cases; both men and women declined to provide this information. 142 people declined to provide their height, 222 their weight and 1078 their waist measurement. Waist measurement has not been used in this report.

A greater proportion of women respondents than men were estimated to be under-weight or of normal weight in this survey; this has not been corrected for age. 41.2% of men in the survey were over-weight (BMI between 25 and 29) and 15.3% were obese. This compares with 50.6% of women who were under weight or normal weight and 44.7% who were over weight or obese (Table 2).

Table 3

Body Mass Index (BMI) of survey respondents by sex

	Males		Females	
	No	Rate / 100	No.	Rate/100
Under weight - BMI = under 18.5	37	1.5	99	3.0
Normal weight - BMI = 18.5-24	929	38.3	1575	47.6
Over weight - BMI = 25-29	999	41.2	931	28.2
Obese - BMI = 30-34	293	12.1	369	11.2
Grossly obese - BMI = 35-39	64	2.6	122	3.7
Grossly obese - BMI = 40 or more	14	0.6	53	1.6
Data missing	91	3.7	158	4.8
Total	2425	100	3303	100

⁴ BMI is calculated by dividing the weight (in kilograms) by the height (in metres) squared

The sample data for people with a BMI of 30 or more were analysed by 5 year age groups, and this was applied to the Kent population, providing estimates of the prevalence of obesity in the county in people aged 16 and over (Table 4 and Appendix D). In 2005 an average of 14.3% of men and 15.8 of women are estimated to be obese with a BMI of 30 or more (because this is taken from a sample, the true figure for men is estimated to lie between 11.3% and 17.3% and the true figure for women is estimated to lie between 12.2% and 19.4%).

A similar calculation has been performed using the Kent and Medway 2001 survey data (Appendix E). The increase in obesity for all people aged 16 and over in Kent from 2001 and 2005 is estimated to lie between 17,645 and 27,213 persons. This is on average a 1% increase in all the adult people in Kent who are obese, or a 15.6% increase in the level of obesity

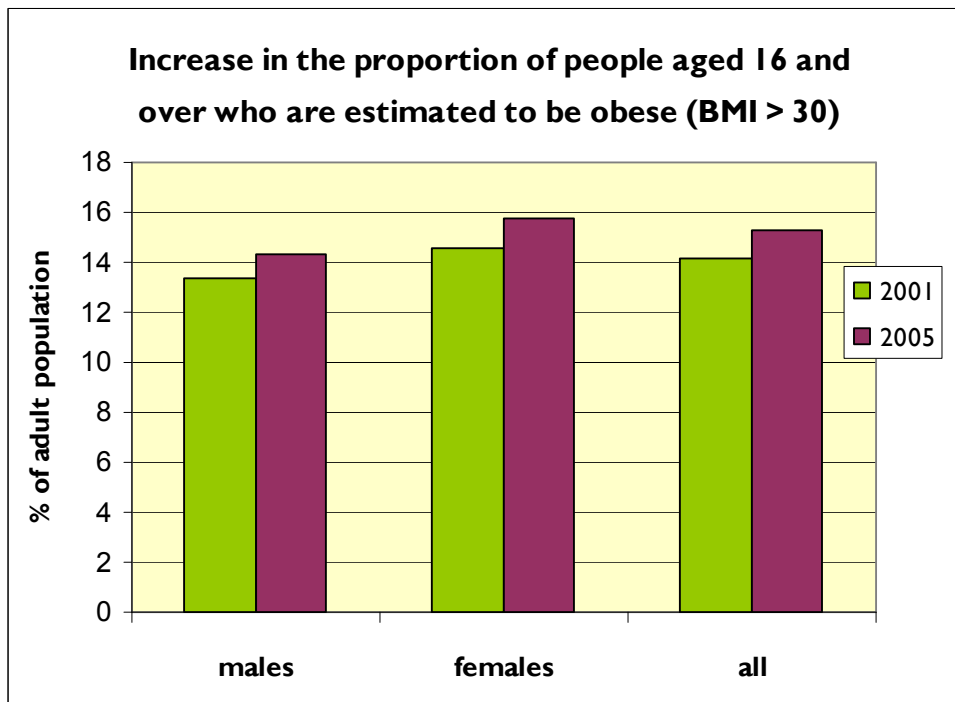
$$\text{Increase in obesity (\%)} = \frac{(\text{number of people obese in 2005}) - (\text{number of people obese in 2001})}{\text{number of people obese in 2001}} \times 100$$

Table 4

Estimated prevalence and 95% confidence intervals of obesity levels in the Kent population 2001 and 2005 based on sample survey

	2001		2005		Increase in numbers 2005-2001	diff in %	% increase over 2001 [(2005-2001) x 100 /2001]
	no	%	no	%			
Males	67,940 +/- 15,343	13.4% +/- 3.0%	74649 +/- 15751	14.3% +/- 3.0%	6710 +/- 2074	0.9% +/- 0.3%	9.9% +/- 3.1%
Females	74,062 +/- 13,563	14.6% +/- 2.7%	89461 +/- 20592	15.8% +/- 3.6%	15399 +/- 4529	1.1% +/- 0.3%	20.8% +/- 6.1%
All	143,595 +/- 20,412	14.2% +/- 2.0%	166,035 +/- 26,383	15.3% +/- 2.4%	22,439 +/- 4,784	1.1% +/- 0.2%	15.6% +/- 3.3%

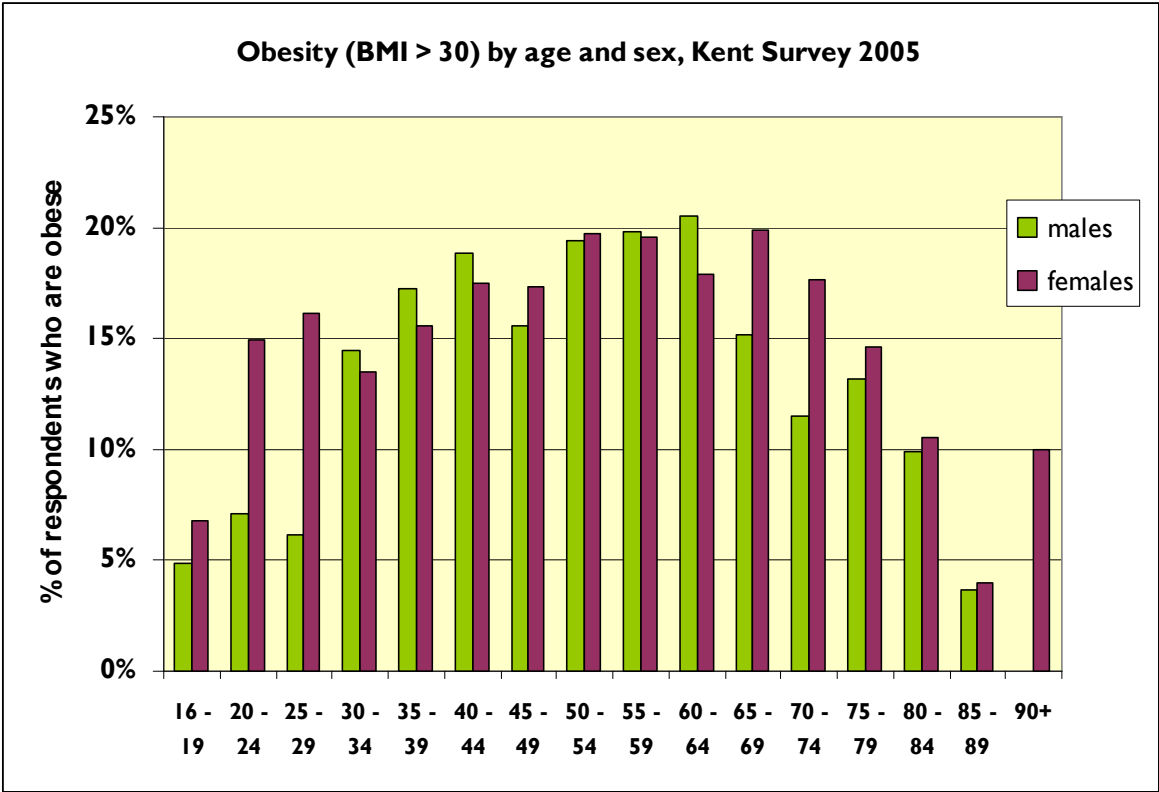
Figure 3



The proportion of young women in the survey with a BMI over 30 is very small; this may reflect a reluctance to respond, or a true low prevalence. The prevalence amongst women rises ten years earlier than in men, rising to 15% at age 20-24 and 16% at 25-29; however obesity in women then levels off to just under 20% of respondents aged 50-69. before reducing again with older age.

Obesity in men does not really begin to appear until after the age of 30, and then rises more quickly than in women to 17% at 35-39 and over 20% at 60-64 falling again after that more quickly than is seen in women (Figure 4).

Figure 4



Obesity appears to have risen in men between 2001 and 2005 mainly in the age groups 30 to 69 with a dip at age 45 to 49 and again after 70 (Figure 5). The increase in obesity in women appears to be more marked under the age of 30 and again from 40-59. There is a reduction seen in older women from 60 to 64 (Figure 6). The detail behind these findings will be explored in more depth in a separate report on obesity as will the relationship between obesity and physical activity.

Figure 5

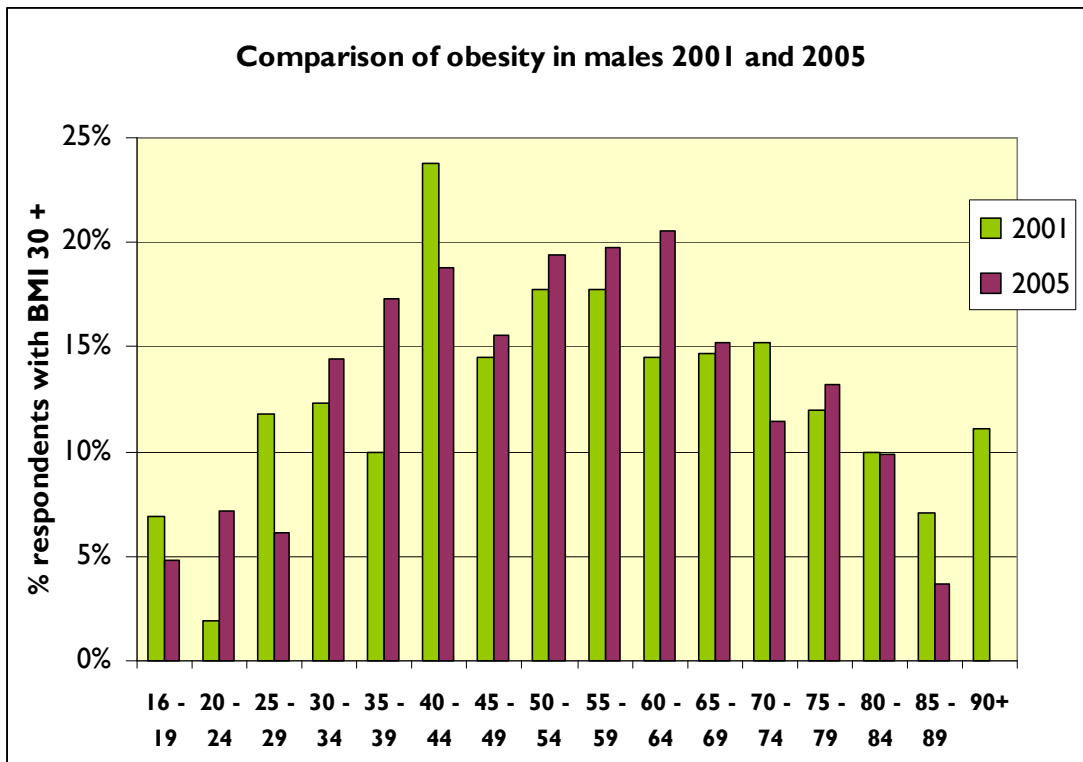
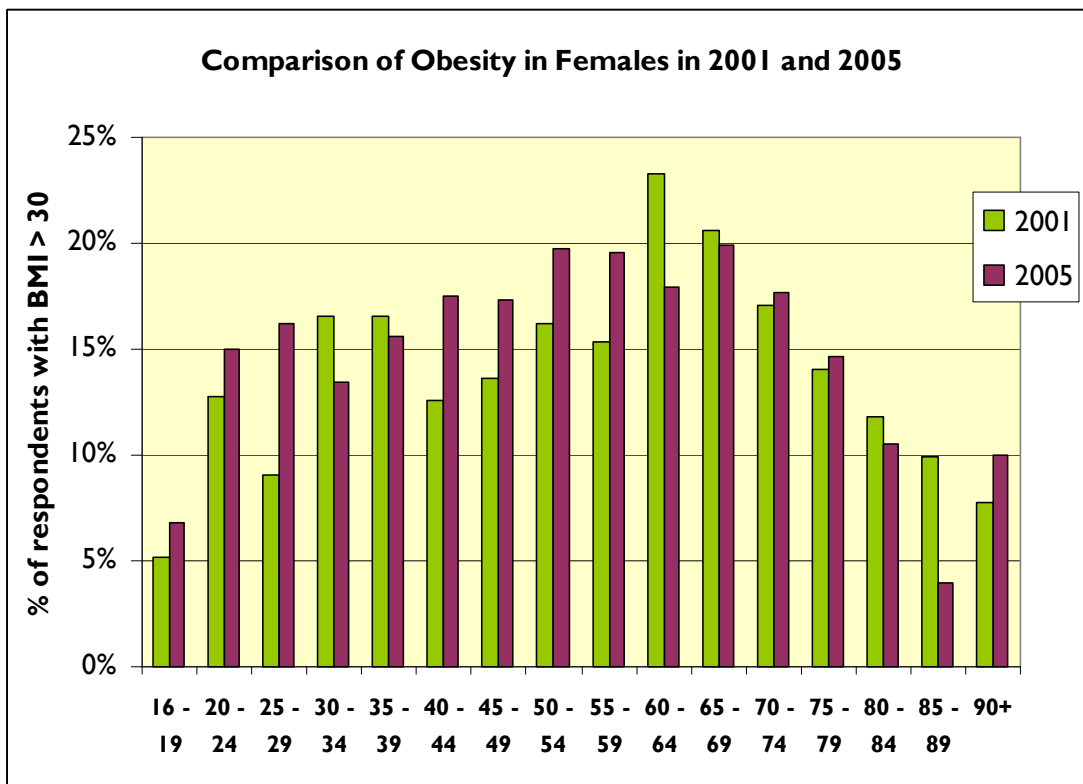


Figure 6



Marital Status does seem to be related to the prevalence of obesity; single men and women are less likely to be obese (11.4% and 13.6% respectively), possibly because they are young. 16.2% of married men and 17.2% of married women were obese, widowers were not likely to be obese (7.3%), the reason for this needs further investigation as it is well known that widowers suffer health problems and depression; this is in contrast to widowed women 16.3% of whom had a BMI of 30 or more. Divorced / separated men were the most likely to be obese with 19.6% with a BMI of 30 or more compared to 16.5% of divorced or separated women (appendix F).

Physical Activity

Respondents were asked whether they considered themselves to be physically active. 72.5% of respondents describe themselves as physically active at least some of the time; 50.1% described themselves as having been active for some time, another 4.0% have recently taken up being active; 18.5% describe themselves as active once in a while (Table 5). 21.3% describe themselves as not active, 1.8% (8.2% of those who are currently inactive) are thinking of becoming active – this group is an important group to target as they are likely to take up activity if encouraged.

Men perceive themselves as being more regularly physically active; in all 75% of male and 71% of female respondents were active at least some of the time. The high level of current physical activity for men held for all age ranges except 75+ when it reduced to 40%. Women became more active with increasing age up to 65-74, after which their activity reduced to 32% (see Appendix G).

Table 5

Self perception of level of physical activity (all respondents, not weighted for age)

Which of the following statements best describes your current level of physical activity	Males		Females	
	No.	%	No.	%
I am currently physically active and have been for some time	1356	56.1%	1516	46.1%
I am currently physically active but have only recently begun	59	2.4%	170	5.2%
I am physically active once in a while, but not regularly	411	17.0%	656	19.9%
I was physically active in the past but not now	318	13.1%	435	13.2%
I am not physically active, but have been thinking about becoming active	30	1.2%	71	2.2%
I am not physically active	126	5.2%	230	7.0%
I don't know / not sure	52	2.1%	112	3.4%
No answer	67	2.8%	102	3.0%
Total	2419	100%	3292	100%

Moderate Activity

There were two approaches in the questionnaire; the first sought to identify the type of activity and how this built into blocks of 30 minutes, the second to verify the total activity and to provide a comparator with 2001.

Respondents were asked :-

Q.43 'How many days a week do you do at least **moderate activity** for **AT LEAST 30 MINUTES at a time?** i.e. things that cause some increase in breathing or heart rate and a feeling of increased warmth'.

For this question they were given a list of possible activities, the aim being to compute these answers to provide a composite of total activity.

Q 45 On how many days a week would you say, on average, you **undertake AT LEAST moderate physical activity?** (please tick one box on each line)

For this question they were provided two lines, one for at least 30 minutes activity and one for at least one hour. It is this question which has been compared to the 2001 survey and the results of which are reported here.

23.9% of all respondents said they were moderately active for at least 30 minutes a day on five or more days a week (Table 6) and 12.6% for an hour or more (Table 7).

Table 6

**Self Reported Moderate Physical Activity for at least 30 minutes
Kent 2005 – results not standardised**

On how many days a week would you say, on average, you undertake at least moderate activity - For 30 minutes at a time	Frequency	Percent
no answer	946	16.3
not at all	931	16.1
less than one day a week	440	7.6
one day a week	451	7.8
two days a week	578	10.0
three days a week	646	11.1
four days a week	423	7.3
five days or more	1385	23.9
Total	5800	100.0

Table 7**Self Reported Moderate Physical Activity for one hour or longer
Kent 2005 – results not standardised**

On how many days a week would you say, on average, you undertake at least moderate activity - For one hour or longer	Frequency	Percent
no answer	1206	20.8
not at all	1360	23.4
less than one day a week	434	7.5
one day a week	662	11.4
two days a week	647	11.2
three days a week	517	8.9
four days a week	246	4.2
five days or more	728	12.6
Total	5800	100.0

In the survey 24.1% of all men and 23.8% of all women said they were moderately active for 30 minutes or more 5 or more days a week. 40.9% of men and 38.8% of women either gave no reply, or stated they did not undertake moderate activity or they were active less than one day a week. The differences between men and women are small and are not statistically significant (Figure 7).

There is no obvious age pattern in men; 15% aged 45-74, increasing to 30% said they do not exercise for 30 minutes at all. One in four men from 25 to 64 and one in five men over 65 were exercising 30 minutes or more on five or more days a week. The age relationship is more marked for women; lack of exercise increases from 9% aged 25-44, 14% aged 45-64 through 21% aged 65-74 and 33% aged 75 and over. One in four women up to the age of 64 exercise five days a week, reducing to 22% at 65-74 and 16% aged 75 and over (Figures 8 and Appendix H).

Figure 7

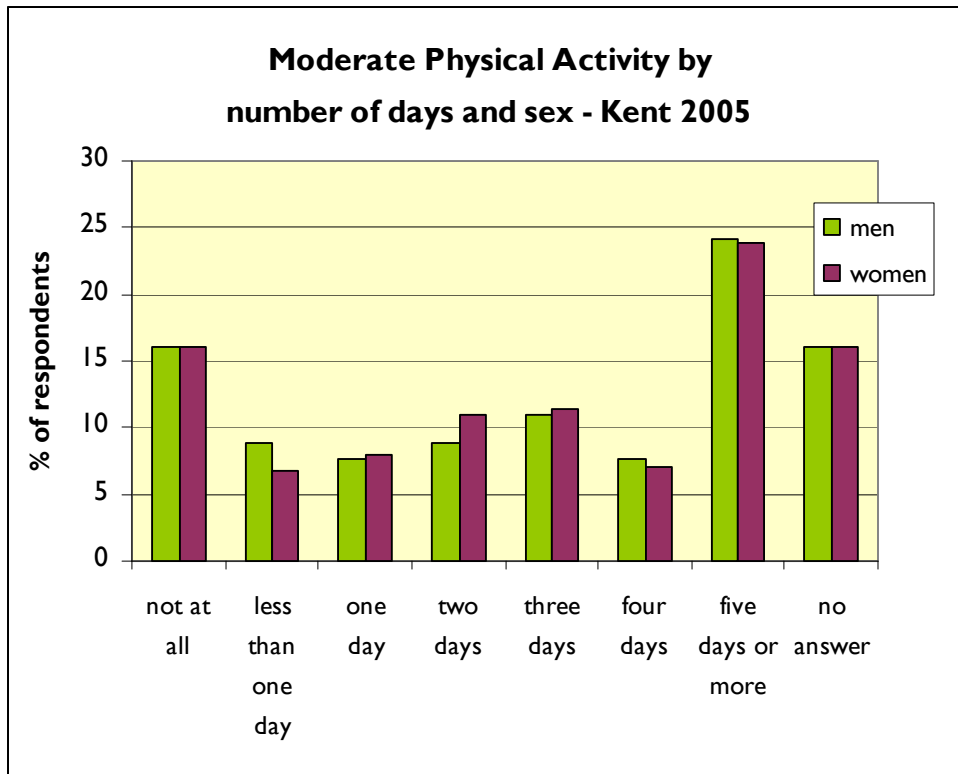
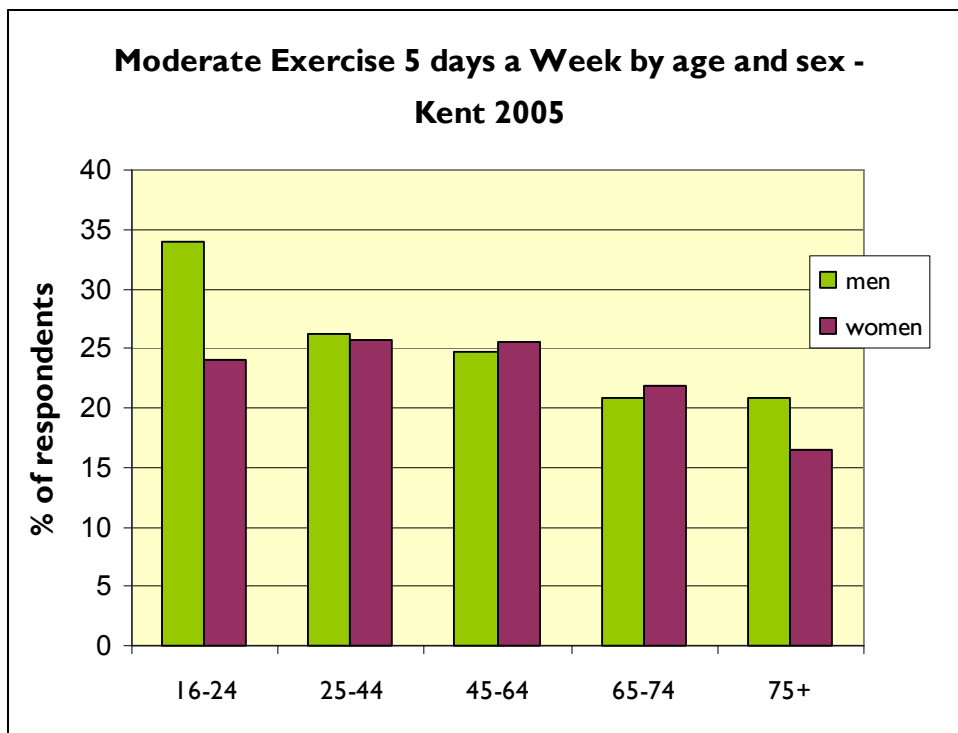


Figure 8



Further analysis reveals that even people who perceive themselves as being currently physically active, and have been for some time are more likely to be undertaking moderate physical activity for less than 5 days a week (Table 8). However the analysis includes people who did not answer the question on moderate activity in the category of 'not moderately active for 5 days or more' and 20% of those saying they are physically active have not recorded if they undertake moderate activity (see Appendix I).

Table 8

Self perception of current level of physical activity by whether undertakes moderate activity 5 days a week

Which of the following statements best describes your current level of physical activity	does not undertake 30 minutes 5 days a week	undertakes physical activity of 30 minutes or more for 5 or more days a week	All
I am currently physically active and have been for some time	1958 67.4%	946 32.6%	2904 100.0%
I am currently physically active but have only recently begun	168 72.1%	65 27.9%	233 100.0%
I am physically active once in a while, but not regularly	910 84.8%	163 15.2%	1073 100.0%
I was physically active in the past but not now	652 84.6%	119 15.4%	771 100.0%
I am not physically active, but have been thinking about becoming	95 93.1%	7 6.9%	102 100.0%
I am not physically active	338 93.4%	24 6.6%	362 100.0%
don't know / not sure	136 79.5%	35 20.5%	171 100.0%
no answer	158 85.9%	26 14.1%	184 100.0%
Total	4415 76.1%	1385 23.9%	5800 100.0%

People who say they have only recently begun to be physically active are more likely to be undertaking moderate activity for less than 5 days, for example 30.5% say they are moderately active for 30 minutes or more on 3-4 days a week.

Comparison of Kent 2005 results with Kent and Medway 2001

The proportions of people active by 5 year age group and by sex in 2001 and 2005 were applied to the 2001 census population for Kent (2002 corrected and 2004 estimated populations respectively). This analysis shows an increase in the total number of people in Kent over the 4 ½ years between surveys from June/July 2001 to Oct 2005/Jan 2006 undertaking 30 minutes of moderate activity 5 times a week or more (Table 9).

Table 9

Number of people (with 95% confidence interval) estimated to be moderately active for 30 minutes or more 5 or more days a week 2001 and 2005 surveys compared.

		2001	2005	estimated increase
Males	Estimated no. active	101,645.4 +/- 5,756	134,070 +/- 13,325	32,653 +/- 19,081
	% active	20.1% +/- 5.7%	25.7% +/- 9.9%	32.1% +/- 20%
Females	Estimated no. active	69,321.4 +/- 12,155	134,298 +/- 7,997	64,977 +/- 20,262
	% active	13.7% +/- 2.4%	23.7% +/- 5.9%	93.7% +/- 30.6%
All Kent	Estimated no. active	163,542 +/- 24,682	263,363 +/- 16,382	99,821 +/- 41,064
	% active	16.2% +/- 2.4%	24.2% +/- 6.2%	61.0% +/- 15.1%

The overall increase in male activity as estimated from this survey in 4.5 years lies between 13,572 and 51,734 people (2.6% and 9.9% of the Kent population and between 13% and 54% more than in 2001) who claim to be active for 30 minutes or more on 5 days a week.

For females the increase is greater; it is estimated the increase in the number of women in Kent who are moderately active for at least 30 minutes lies between 44,715 and 85,239 more women aged 16 and over (8.0% and 15.2% of the Kent female population aged 16 and over and between 65% and 123% more than in 2001).

Who claim to be taking 30 minutes of moderate exercise for 30 minutes or more 5 days a week or more.

Overall the increase in number of persons in Kent aged 16 and over estimated to be moderately active for 30 minutes or more lies between 58,757 and 140,885 (5.4% and 13.0% of the Kent population and between 31% and 101% increase over 2001) . This equates to be an annual increase of between 1.2% and 2.9% of the Kent population aged 16 and over.

It must be considered that this may be a possible response bias; i.e. that people interested in being active were more likely to respond to the second survey. There may also be a bias as a result of slightly different wording in 2001 from 2005, although in 2005 the question specified at least moderate activity and in 2001 the question asked for ANY physical activity and would have been expected to result in a higher response rate.

There is much more variation across the age groups for men than there is for women. Men have shown an increase in the younger age groups from 29.5% to 36.1% (+22.46%) in young men up to 13.3% to 25.3% (+90%) in men aged 40-44 and 13.3% to 23.3% (75.8%) in men aged 50-54. Although there has been a fall in activity rates in older men there are still higher proportions taking part in moderate activity 5 times a week than there were amongst middle aged men in 2001 (Figure 9).

Activity rates in women are higher in 2005 right across the age groups with more than 20% of younger women in every age group up to the age of 74 still participating for 30 minutes of more 5 days a week (Figure 10).

Figure 9

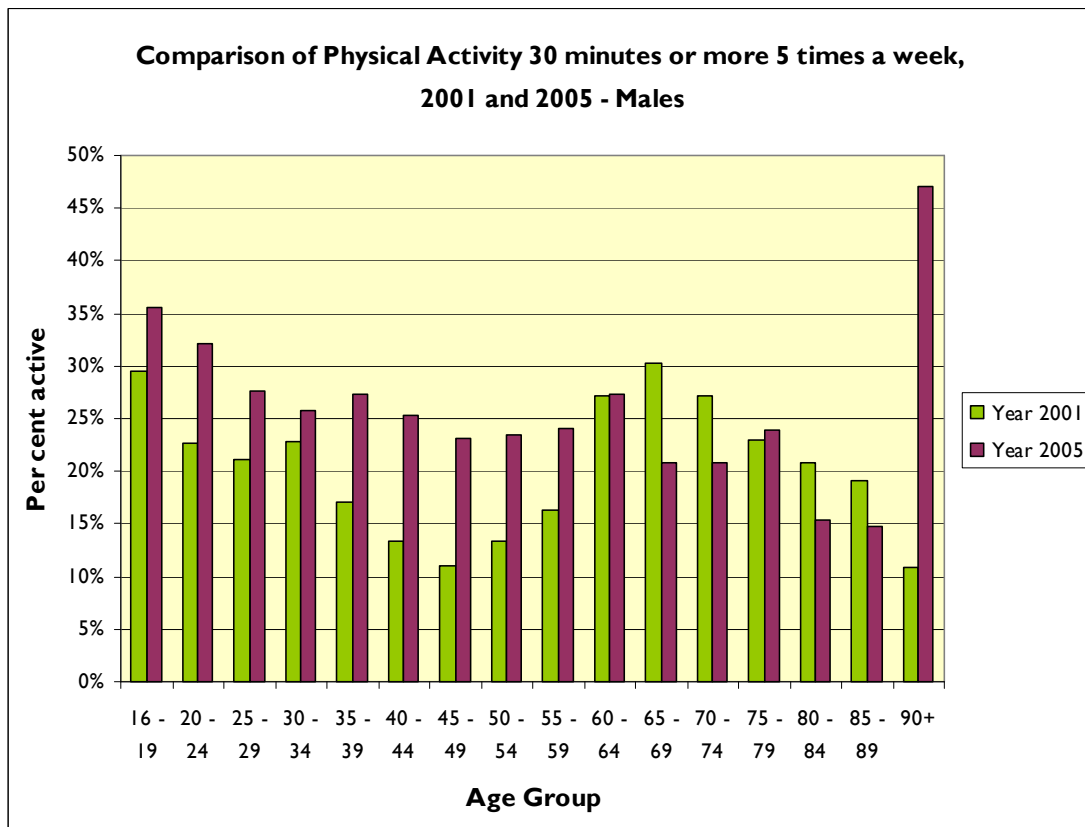
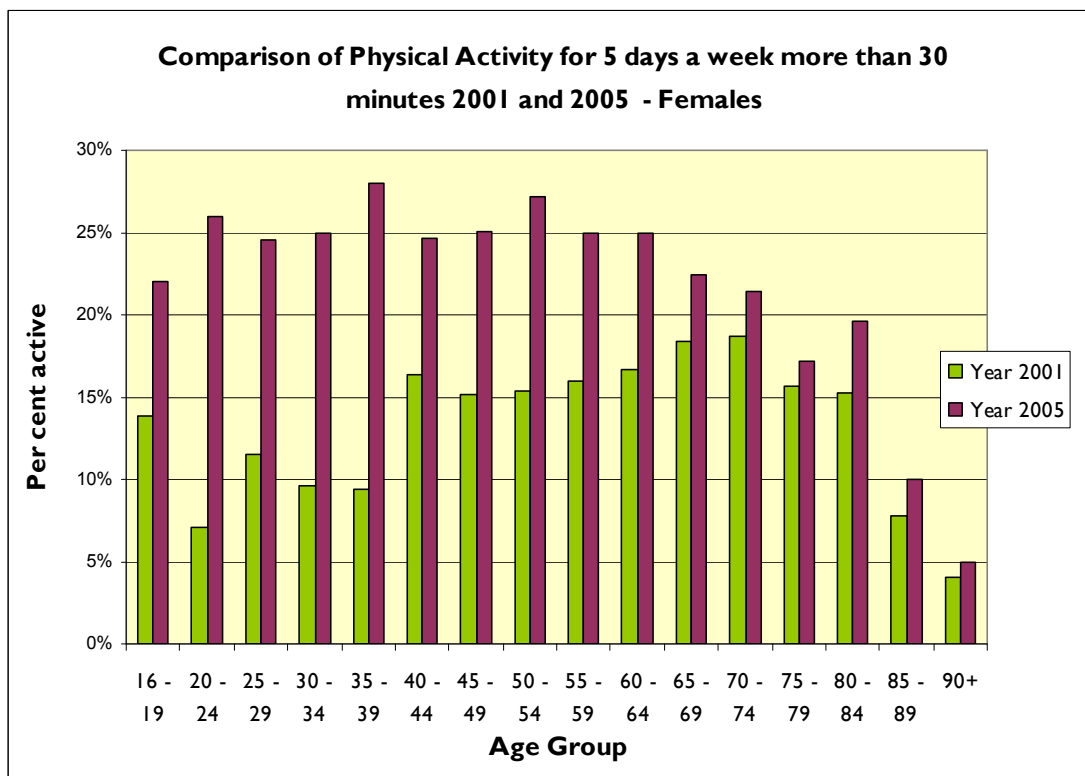


Figure 10



In relation to the question on the list of possible moderate activities respondents may do, the most commonly reported activities contributing to the 30 minutes, 5 days a week recommendation are housework, manual labour, walking and workplace activity (Table 10). Data can be further analysed to provide an accumulation of activities; this will be reported in a further publication.

Table 10
Moderate Activities reported 30 minutes a day five days or more by sex

	Males (n: 2427)		Females (n: 3307)	
	No.	%	No.	%
Housework	223	9.2%	865	26.2%
Manual labour	431	17.8%	192	5.8%
Walking (e.g. walking to work, shops, the dog)	890	36.7%	1128	34.1%
Workplace activity (i.e. walking around, not sitting or standing)	860	35.4%	1003	30.3%
Cycling (e.g. cycling to work, shops, exercise bike)	77	3.2%	65	2.0%
Horse riding	2	0.1%	23	0.7%
Light gardening (e.g. pruning, mowing lawn, raking leaves)	102	4.2%	85	2.6%
Exercise class	18	0.7%	37	1.1%
Playing with children (e.g. in garden or park)	58	2.4%	167	5.0%
Dancing (social)	2	0.1%	10	0.3%
Washing and waxing a car	8	0.3%	5	0.2%
Pushing/wheeling self in wheelchair	10	0.4%	9	0.3%
Cricket	3	0.1%	2	0.1%
Water aerobics	1	0.0%	2	0.1%
Swimming	10	0.4%	17	0.5%

Table 10 continued	Males (n: 2427)		Females (n: 3307)	
	No.	%	No.	%
Skating	4	0.2%	4	0.1%
Stretching	190	7.8%	281	8.5%
Yoga	9	0.4%	28	0.8%
Tai-chi	5	0.2%	3	0.1%
Other ⁵	151	6.2%	140	4.2%

Longer durations of moderate activity

As already mentioned, respondents were also asked (in Q45) if they undertook moderate intensity activity which lasted an hour or more (Table 11). They could reply 'Not at all', 'Less than one day a week' or give the number of days per week they exercised at this level for at least one hour at a time. Replies were quite similar for men and women with just over 40% reporting exercising at this level and duration for at least one day a week, and a further 8% saying they did this less often. Around a quarter said they never exercised at this level.

Table 11

How many days a week would you say on average you undertake at least moderate activity for one hour or longer?

	Males		Females	
	No.	%	No.	%
No answer	415	17.1%	754	22.8%
Not at all	564	23.2%	785	23.7%
Less than once a week	195	8.0%	236	7.1%
One or two days a week	542	22.4%	762	23.0%
Three or four days a week	348	14.3%	410	12.4%
Five or more days a week	363	15.0%	360	10.9%
Total	2427	100%	3307	100%

⁵ Respondents were asked to mention other moderate activities not on the list, which resulted in a variety of responses, including answers that featured on the list of activities classed as vigorous, indicating that these respondents may have considered these activities as moderate within their lifestyle.

Vigorous activity

In addition to the questions on moderate intensity exercise, the survey also asked about participation in vigorous sport or recreational activities. These are activities for at least 30 minutes at a time that make you breathless and make you sweat. The question was posed in a similar manner to the moderate intensity question, in that it presented a list of such activities and asked the frequency they are undertaken.

The table 12 below shows numbers taking part in vigorous exercise, for at least 30 minutes at a time on three days a week or more, as this has sometimes been regarded as an alternative target to the five or more days of moderate activity.

Table 12
Vigorous activities on three days a week or more

	Males (n: 2427)		Females (n: 3307)	
	No	%	No	%
Workplace programme	47	1.9%	68	2.0%
Talent development	24	1.0%	21	0.7%
Running / jogging	99	4.1%	85	2.5%
Net/ basket ball	2	0.1%	5	0.1%
Playing football	22	0.9%	2	0.0%
Playing tennis / racquet sports	19	0.8%	11	0.3%
Skipping rope	2	0.1%	11	0.3%
Aerobics	5	0.2%	37	1.1%
Weight lifting	83	3.5%	48	1.4%
Gym workout	111	4.5%	115	3.6%
Climbing	8	0.3%	6	0.2%
Heavy gardening	74	3.1%	44	1.4%
Other ⁶	165	6.8%	135	4.1%

⁶ Respondents were asked to mention other vigorous activities not on the list, which resulted in a variety of responses, including answers that featured on the list of activities classed as moderate, indicating that these respondents may have considered these activities as vigorous within their lifestyle.

Exercise at this intensity was only carried out by a minority of people, for example both men and women were 'working out' in a gym, went running/jogging or followed a workplace programme on three or more days per week. Next most popular with men were weight-lifting and heavy gardening. Apart from the above activities, which were each ticked by 2-5% of people, the most frequently ticked category for both men and women was 'other' vigorous activities. These were somewhat varied and not given in detail here.

Note that Wheelchair sports are excluded from the above table as there were only 3 participants who were doing this on one day a week or less frequently.

Do you wear a pedometer?

This question has been asked for the first time to see how widespread the use of pedometers currently is and to assess up-take in the future, when pedometers could provide an alternative and more reliable measure of exercise. In this survey 168 women (6.0%) and only 73 (3.6%) of the men wore a pedometer. The survey also asked how many paces were clocked up each day, but the small numbers of responses have not so far been subject to analysis.

Have you received advice on physical activity?

391 men (16.1%) and 634 women (19.2%) said they had received advice on physical activity (table 13). A high proportion of respondents would like to go for advice. It will be important to look at this in more detail, for example by age and sex, and locality of residence and whether this is deprived.

The survey asked about sources of advice on exercise that people thought they would use, and nearly half said they would get advice from a leisure or similar club. Next most likely for men was GP one-to-one advice on exercise, while women were more likely to consult magazines for advice. Around 10-15% of men and women said they would use other sources of advice, although hardly anyone used GP group sessions for advice on exercise.

Table 13**Sources of advice on exercise by sex**

Where would you go for advice on exercise?	Males (n: 2427)		Females (n: 3307)	
	No.	%	No.	%
Leisure centre or similar club	962	39.6%	1598	48.3%
Personal trainer	270	11.1%	495	15.0%
GP one-to-one	616	25.4%	468	14.2%
GP Practice nurse one-to-one	268	11.0%	363	11.0%
GP Group sessions	44	1.8%	94	2.8%
Physio or other health professional	272	11.2%	439	13.3%
Internet advice	244	10.1%	285	8.6%
Magazines	347	14.3%	782	23.6%
Other	298	12.3%	318	9.6%

Barriers to undertaking physical activity

The survey asked which reasons prevented people from taking more exercise. Both men and women cited lack of time (40%) and incentive (24% lacked motivation), with significant numbers of women (25%) saying that lack of money prevented them from taking more exercise. Illness or disability was a barrier for nearly one in five and a variety of other reasons were given. Lack of transport (7%) and lack of easily available facilities (11%) were the least cited barriers to taking more exercise (Table 14).

Table 14**What prevents you taking more exercise?**

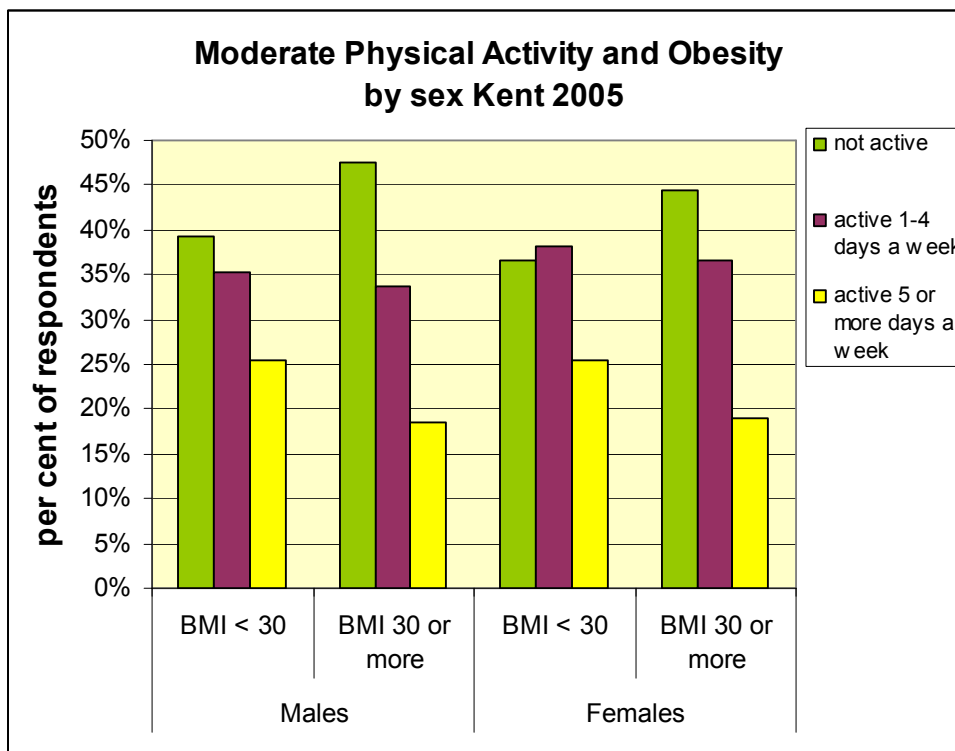
	Males (n: 2427)		Females (n: 3307)	
	No.	%	No.	%
Lack of leisure time	919	37.9%	1350	40.8%
Lack of money	388	16.0%	825	24.9%
Lack of transport	87	3.6%	300	9.1%
Lack of easily available facilities at work	295	12.2%	344	10.4%
Lack of easily available facilities in the community	208	8.6%	378	11.4%
Lack of interesting or relevant activities	317	13.1%	443	13.4%
Illness or disability	489	20.1%	612	18.5%
Lack of incentive	580	23.9%	825	24.9%
Other reason	377	15.5%	526	15.9%

What factors might lead to people exercising less?**I. Obesity**

33.2% of obese people (those with a BMI over 30) were not exercising once a week (and 13.0% declined to answer); this compares with 21.4% with a BMI less than 30 (another 16.3% declined to respond to the question on activity). 18.8% of obese people said they were active 5 or more days a week, compared to 25.4% of those whose BMI was less than 30; this difference is significant (Chi sq. = 27.856; 2df; p=0.000).

There was little difference between men and women except that women who were not obese (BMI less than 30) were more likely to be active on 1-4 days a week (Figure 11).

Figure 11

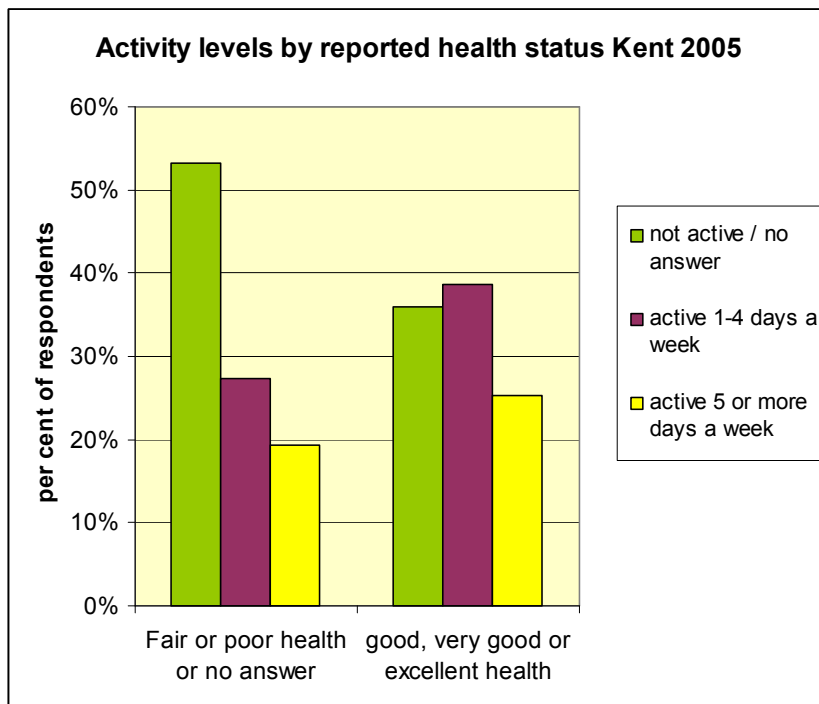


2. General Health

17.1% of men and 16.6% of women said their health was fair and 5.3% of men and 3.3% of women participating said their health was poor. The proportions saying their health was fair or poor increased from 17.5% at 16-24 and 13.2% at 25-34 to 25.3% at 65-74 and 40.2% aged 75 and over.

People who reported their general health to be fair or poor or who did not respond to this question were significantly less likely to be active at all (43.3% were active less than 1 day a week or declined to respond - Chi sq.=127.761; 2df; p=0.000), and less likely to be active on 5 days a week (19.1% compared to 25.2% who reported good, very good or excellent health - Chi sq. 19.84; 1 d.f.; p.0.000) (Figure 12). This difference held for both men (19.5% active 5 or more days compared to 25.6% in good or excellent health) and women (19.6% active compared to 24.9% in good or excellent health).

Figure 12



Poor health is strongly associated with obesity; 25.8% of people reporting poor or fair health or who did not respond had a BMI of 30 or higher (obese) compared to 13.4% of people reporting good or excellent health (Chi sq. = 171.93; 1df; p=0.000). 37.5% of obese people reported fair or poor health (or did not respond to the question) compared to 19.3% of people whose BMI was below 30.

3. Disability

People who reported a long standing illness or disability were significantly more likely to be obese (Chi sq. 87.32; 2df, p=0.000); 20.7% had a BMI of 30 or more compared to 12.8% without a disability. 53.8% of obese people reported a long standing illness or disability compared to 38.7% with a BMI below 30.

Table 15**Physical Activity amongst obese people (BMI 30 or more)**

	Do you have a long standing illness, disability or infirmity that has troubled you over a period of time?			
	Yes		No	
	No.	%	No.	%
N/A	68	13.8	53	12.6
Not at all / less than one day a week	183	38.5	112	26.5
1-2 days a week	77	15.6	89	21.1
3-4 days a week	65	13.3	89	21.1
5 or more days a week	92	18.7	79	18.7
Total	491	100	422	100

Obese and disabled people were significantly more likely not to exercise; however those who do exercise are just as likely to do 30 minutes or more 5 days a week as those without a disability (Table 15).

Concluding remarks

This report is one of a series describing results from the 'Kent 2005 survey of health and lifestyle', carried out by the University of Kent and commissioned by Kent County Council in order to monitor PSA physical activity targets. This report focuses on obesity and physical activity.

Further reports are planned to describe 1) health and lifestyle of people who act as informal carers, and 2) to provide the overall results including an East/West Kent split. KCC will also be supplied with the data and tabulations of the results in paper and electronic formats.

Data from surveys of this size are expensive to carry out, but provide a vast resource for analysis over subsequent years. According to organisational needs and priorities, it is anticipated that more analysis and reporting will be undertaken. The survey included questions on physical, mental and emotional health (SF-36), depression and anxiety, chronic illness, diet and weight, physical activity, transport, smoking, alcohol consumption,

neighbourhood and community (Social Capital), caring for others and other socio-demographic variables.

It is recommended that more detailed analysis and reporting of physical activity is carried out, especially as this was the focus of the survey. Further analysis of health, well-being and mental health in particular is also recommended.

APPENDIX A

Physical activity definitions and survey questions

Moderate Intensity Physical Activity:

Definition: (from DCMS/ Sport England Guidance Notes: Sport and Physical Activity in 2nd Generation Public Service Agreements”: November 2004):

Moderate Intensity Physical Activity: “The precise definition of moderate intensity physical activity (mipa) varies according to the fitness level of the participant. A person doing mipa will usually experience an increase in breathing rate, an increase in heart rate and a feeling of increased warmth – possibly accompanied by sweating. The technical definition used by the Chief Medical Officer is as follows: “Moderate intensity for a person with a moderate fitness level has a Metabolic Equivalent (MET) value of between 4.6 and 6.3. MET values are assigned to activities to denote their intensity and are given in multiples of resting metabolic rate.”

Kent Survey 2005

Q43 a) How many days per week do you do **moderate activities** for **AT LEAST 30 MINUTES at a time**, i.e. things that cause some increase in breathing or heart rate and a feeling of increased warmth? *(there is a section for vigorous activities over the page)*

Q 45 On how many days a week would you say, on average, you undertake **AT LEAST moderate physical activity?** (please tick one box on each line)

	Not at all	Less than once a week	One day a week	Two days a week	Three days a week	Four days a week	Five days or more
a) For thirty minutes at a time	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
b) For one hour or longer?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

Kent and Medway Survey 2001

NEXT SOME QUESTIONS ABOUT THE EXERCISE YOU TAKE

Q9. On **average**, how often do you undertake **any** physical activity which lasts for **30 minutes** or more?

Never or less than one day a month

More than once a month but less than once a week

One to two times a week

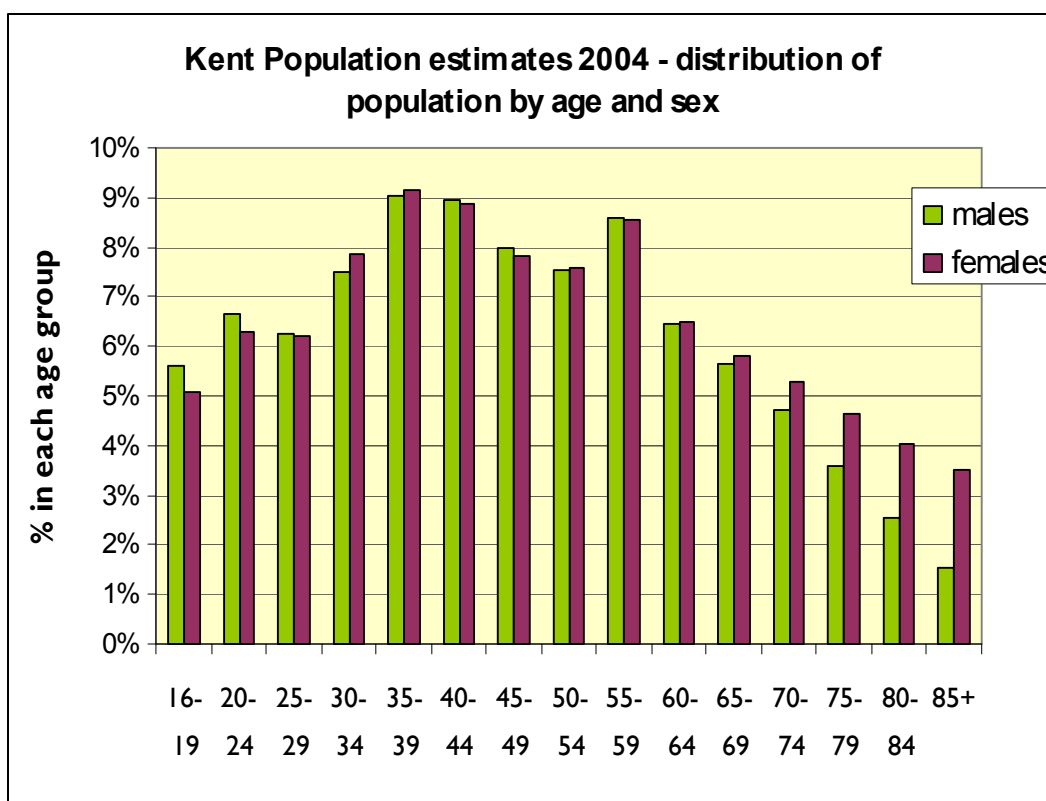
Three or four times a week

Five or more times a week

Appendix B

Kent Population estimates 2004

Age Group	Males		Females	
	no.	%	no.	%
16-19	31268	5.61%	29424	5.09%
20-24	37044	6.64%	36345	6.29%
25-29	34934	6.26%	35866	6.21%
30-34	41878	7.51%	45377	7.86%
35-39	50312	9.02%	52889	9.16%
40-44	49923	8.95%	51172	8.86%
45-49	44457	7.97%	45213	7.83%
50-54	42093	7.55%	43763	7.58%
55-59	47814	8.57%	49377	8.55%
60-64	35901	6.44%	37593	6.51%
65-69	31523	5.65%	33427	5.79%
70-74	26225	4.70%	30441	5.27%
75-79	19918	3.57%	26884	4.65%
80-84	14198	2.55%	23337	4.04%
85+	8470	1.52%	20355	3.52%



Appendix C

Marital Status (Kent 2005 Survey) by age and sex - males

Age	What is your marital status					Total
	no answer	single	married or living as married	widowed	divorced or separated	
16-24	0 .0%	113 95.8%	5 4.2%	0 .0%	0 .0%	118 100.0%
25-44	0 .0%	115 23.6%	350 71.9%	1 .2%	21 4.3%	487 100.0%
45-64	0 .0%	77 7.8%	799 80.9%	9 .9%	103 10.4%	988 100.0%
65-74	1 .2%	12 2.5%	413 85.2%	33 6.8%	26 5.4%	485 100.0%
75+	3 .9%	14 4.1%	237 69.5%	79 23.2%	8 2.3%	341 100.0%
Total	4 .2%	331 13.7%	1804 74.6%	122 5.0%	158 6.5%	2419 100.0%

Marital Status by age and sex - females

Age	What is your marital status					Total
	no answer	single	married or living as married	widowed	divorced or separated	
16-24	0	210	34	0	1	245
	.0%	85.7%	13.9%	.0%	.4%	100.0%
25-44	0	172	653	5	82	912
	.0%	18.9%	71.6%	.5%	9.0%	100.0%
45-64	1	44	981	74	178	1278
	.1%	3.4%	76.8%	5.8%	13.9%	100.0%
65-74	0	16	283	110	47	456
	.0%	3.5%	62.1%	24.1%	10.3%	100.0%
75+	2	25	133	217	24	401
	.5%	6.2%	33.2%	54.1%	6.0%	100.0%
Total	3	467	2084	406	332	3292
	.1%	14.2%	63.3%	12.3%	10.1%	100.0%

Appendix D

Obesity Estimates for 2005 from Kent 2005 Survey Males

Age	number BMI 30 + (r)	number in database (n)	number in population (q)	p=r/n	expected no. in population	percent
16 - 19	3	62	36,240	0.05	1754	4.84%
20 - 24	4	56	37,000	0.07	2643	7.14%
25 - 29	4	65	34,900	0.06	2148	6.15%
30 - 34	14	97	41,900	0.14	6047	14.43%
35 - 39	24	139	50,300	0.17	8685	17.27%
40 - 44	35	186	49,900	0.19	9390	18.82%
45 - 49	33	212	44,500	0.16	6927	15.57%
50 - 54	39	201	42,100	0.19	8169	19.40%
55 - 59	56	283	47,800	0.20	9459	19.79%
60 - 64	60	292	35,900	0.21	7377	20.55%
65 - 69	38	250	31,500	0.15	4788	15.20%
70 - 74	27	235	26,200	0.11	3010	11.49%
75 - 79	21	159	19,900	0.13	2628	13.21%
80 - 84	11	111	14,200	0.10	1407	9.91%
85 - 89	2	54	5,900	0.04	219	3.70%
90+	0	17	2,600	0.00	0	0.00%
total	371	2419	520,840		74,649	14.33%
				CI	+/-15,751	+/-3.02%

**Obesity Estimates for 2005 from Kent 2005 Survey
Females**

Age	number BMI 30 + (e)	number in database (n)	number in population (q)	p=r/n	expected no. in population	percent
16 - 19	8	118	34,240	0.07	2321	6.78%
20 - 24	19	127	36,300	0.15	5431	14.96%
25 - 29	27	167	35,900	0.16	5804	16.17%
30 - 34	28	208	45,400	0.13	6112	13.46%
35 - 39	40	257	52,900	0.16	8233	15.56%
40 - 44	49	280	51,200	0.18	8960	17.50%
45 - 49	49	283	45,200	0.17	7826	17.31%
50 - 54	61	309	43,800	0.20	8647	19.74%
55 - 59	73	373	49,400	0.20	9668	19.57%
60 - 64	56	313	37,600	0.18	6727	17.89%
65 - 69	48	241	33,400	0.20	6652	19.92%
70 - 74	38	215	30,400	0.18	5373	17.67%
75 - 79	29	198	26,900	0.15	3940	14.65%
80 - 84	14	133	23,300	0.11	2453	10.53%
85 - 89	2	50	12,100	0.04	484	4.00%
90+	2	20	8,300	0.10	830	10.00%
total	543	3292	566,340		89,461	15.80%
				CI	20,592	+/-3.64%

Appendix E

Obesity Estimates for 2001 from Kent and Medway Survey Males

Age	Number BMI 30 + (r)	Number in database (n)	Number in population (q)	Proportion $p=r/n$	Expected no. in population (e)	Percent $\%=e/q$
16 - 19	6	87	33144	0.07	2286	6.90%
20 - 24	1	52	34948	0.02	672	1.92%
25 - 29	10	85	36908	0.12	4342	11.76%
30 - 34	16	130	45575	0.12	5609	12.31%
35 - 39	14	141	50112	0.10	4976	9.93%
40 - 44	35	147	45854	0.24	10918	23.81%
45 - 49	21	145	41486	0.14	6008	14.48%
50 - 54	37	208	48256	0.18	8584	17.79%
55 - 59	37	208	40296	0.18	7168	17.79%
60 - 64	27	186	33675	0.15	4888	14.52%
65 - 69	26	177	29686	0.15	4361	14.69%
70 - 74	25	164	25374	0.15	3868	15.24%
75 - 79	56	466	19531	0.12	2347	12.02%
80 - 84	32	321	12642	0.10	1260	9.97%
85 - 89	8	113	5892	0.07	417	7.08%
90+	4	36	2120	0.11	236	11.11%
total	355	2666	505499	0.13	67940	13.44%
				CI =	+/-15343	+/-3.04%

**Obesity Estimates for 2001 from Kent and Medway Survey
Females**

Age	number BMI 30 + (e)	number in database (n)	number in population (q)	p=r/n	expected no. in population (e)	Percent %=e/q
16 - 19	6	116	33144	0.05	1714	5.17%
20 - 24	16	125	34948	0.13	4473	12.80%
25 - 29	14	154	36908	0.09	3355	9.09%
30 - 34	37	224	45575	0.17	7528	16.52%
35 - 39	44	266	50112	0.17	8289	16.54%
40 - 44	32	254	45854	0.13	5777	12.60%
45 - 49	33	243	41486	0.14	5634	13.58%
50 - 54	50	309	48256	0.16	7808	16.18%
55 - 59	41	267	40296	0.15	6188	15.36%
60 - 64	51	219	33675	0.23	7842	23.29%
65 - 69	46	223	29686	0.21	6124	20.63%
70 - 74	35	205	25374	0.17	4332	17.07%
75 - 79	85	604	19531	0.14	2749	14.07%
80 - 84	52	439	12642	0.12	1497	11.85%
85 - 89	21	211	5892	0.10	586	9.95%
90+	7	90	2120	0.08	165	7.78%
total	570	3949	505499	0.14	74062	14.65%
				CI =	+/-13563	+/-2.68%

Appendix F

BMI and marital status (Kent 2005 Survey) by sex - males

Body Mass Index	What is your marital status					Total
	no answer	single	married or living as married	widowed	divorced or separated	
no answer	0 .0%	27 8.1%	50 2.8%	9 7.3%	5 3.2%	91 3.7%
BMI less than 30	4 100.0%	267 80.4%	1467 81.0%	105 85.4%	122 77.2%	1965 81.0%
BMI 30 or over	0 .0%	38 11.4%	293 16.2%	9 7.3%	31 19.6%	371 15.3%
Total	4 100.0%	332 100.0%	1810 100.0%	123 100.0%	158 100.0%	2427 100.0%

BMI and marital status by sex - females

Body Mass Index	What is your marital status					Total
	no answer	single	married or living as married	widowed	divorced or separated	
no answer	1 25.0%	34 7.2%	68 3.2%	39 9.6%	16 4.8%	158 4.8%
BMI less than 30	3 75.0%	372 79.1%	1666 79.6%	301 74.1%	263 78.7%	2605 78.8%
BMI 30 or over	0 .0%	64 13.6%	359 17.2%	66 16.3%	55 16.5%	544 16.4%
Total	4 100.0%	470 100.0%	2093 100.0%	406 100.0%	334 100.0%	3307 100.0%

Appendix G

Which of the following statements best describes your current level of physical activity (Kent 2005 Survey) by Age - Males

Which of the following statements best describes your current level of physical activity	Age recoded into broad age bands					Total
	16-24	25-44	45-64	65-74	75+	
no answer	2 1.7%	8 1.6%	21 2.1%	15 3.1%	21 6.2%	67 2.8%
I am currently physically active and have been for some time	72 61.0%	271 55.6%	575 58.2%	299 61.6%	139 40.8%	1356 56.1%
I am currently physically active but have only recently begun	5 4.2%	24 4.9%	24 2.4%	2 .4%	4 1.2%	59 2.4%
I am physically active once in a while, but not regularly	21 17.8%	103 21.1%	187 18.9%	55 11.3%	45 13.2%	411 17.0%
I was physically active in the past but not now	9 7.6%	50 10.3%	107 10.8%	67 13.8%	85 24.9%	318 13.1%
I am not physically active, but have been thinking about becoming active	5 4.2%	8 1.6%	12 1.2%	3 .6%	2 .6%	30 1.2%
I am not physically active	1 .8%	14 2.9%	47 4.8%	31 6.4%	33 9.7%	126 5.2%
don't know / not sure	3 2.5%	9 1.8%	15 1.5%	13 2.7%	12 3.5%	52 2.1%
Total	118 100.0%	487 100.0%	988 100.0%	485 100.0%	341 100.0%	2419 100.0%

Which of the following statements best describes your current level of physical activity by Age - Females

Which of the following statements best describes your current level of physical activity	Age recoded into broad age bands					Total
	16-24	25-44	45-64	65-74	75+	
no answer	5 2.0%	11 1.2%	21 1.6%	24 5.3%	41 10.2%	102 3.1%
I am currently physically active and have been for some time	94 38.4%	405 44.4%	656 51.3%	231 50.7%	130 32.4%	1516 46.1%
I am currently physically active but have only recently begun	23 9.4%	77 8.4%	54 4.2%	11 2.4%	5 1.2%	170 5.2%
I am physically active once in a while, but not regularly	67 27.3%	243 26.6%	257 20.1%	50 11.0%	39 9.7%	656 19.9%
I was physically active in the past but not now	26 10.6%	89 9.8%	154 12.1%	68 14.9%	98 24.4%	435 13.2%
I am not physically active, but have been thinking about becoming active	13 5.3%	31 3.4%	23 1.8%	3 .7%	1 .2%	71 2.2%
I am not physically active	8 3.3%	33 3.6%	79 6.2%	47 10.3%	63 15.7%	230 7.0%
don't know / not sure	9 3.7%	23 2.5%	34 2.7%	22 4.8%	24 6.0%	112 3.4%
Total	245 100.0%	912 100.0%	1278 100.0%	456 100.0%	401 100.0%	3292 100.0%

Appendix H

Frequency of Moderate Activity (Kent 2005 Survey) by Age and Sex - Males

On how many days a week would you say, on average, you undertake at least moderate activity - For 30 minutes at a time	Age recoded into broad age bands					Total
	16-24	25-44	45-64	65-74	75+	
no answer	20	57	144	110	59	390
	16.9%	11.7%	14.6%	22.7%	17.3%	16.1%
not at all	10	49	151	73	104	387
	8.5%	10.1%	15.3%	15.1%	30.5%	16.0%
less than one day a week	7	50	102	44	11	214
	5.9%	10.3%	10.3%	9.1%	3.2%	8.8%
one day a week	9	41	85	30	19	184
	7.6%	8.4%	8.6%	6.2%	5.6%	7.6%
two days a week	11	61	86	30	24	212
	9.3%	12.5%	8.7%	6.2%	7.0%	8.8%
three days a week	10	58	107	52	37	264
	8.5%	11.9%	10.8%	10.7%	10.9%	10.9%
four days a week	11	43	69	45	16	184
	9.3%	8.8%	7.0%	9.3%	4.7%	7.6%
five days or more	40	128	244	101	71	584
	33.9%	26.3%	24.7%	20.8%	20.8%	24.1%
Total	118	487	988	485	341	2419
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Frequency of Moderate Activity by Age and Sex - Females

On how many days a week would you say, on average, you undertake at least moderate activity - For 30 minutes at a time	Age recoded into broad age bands					Total
	16-24	25-44	45-64	65-74	75+	
no answer	23	106	196	105	96	526
	9.4%	11.6%	15.3%	23.0%	23.9%	16.0%
not at all	35	84	181	97	132	529
	14.3%	9.2%	14.2%	21.3%	32.9%	16.1%
less than one day a week	19	81	80	21	19	220
	7.8%	8.9%	6.3%	4.6%	4.7%	6.7%
one day a week	31	78	97	28	26	260
	12.7%	8.6%	7.6%	6.1%	6.5%	7.9%
two days a week	29	118	166	31	18	362
	11.8%	12.9%	13.0%	6.8%	4.5%	11.0%
three days a week	27	136	138	45	29	375
	11.0%	14.9%	10.8%	9.9%	7.2%	11.4%
four days a week	22	75	94	29	15	235
	9.0%	8.2%	7.4%	6.4%	3.7%	7.1%
five days or more	59	234	326	100	66	785
	24.1%	25.7%	25.5%	21.9%	16.5%	23.8%
Total	245	912	1278	456	401	3292
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

APPENDIX I

Perception of physical activity level (Kent 2005 Survey) by frequency of undertaking moderate activity

Which of the following statements best describes your current level of physical activity	On how many days a week would you say, on average, you undertake at least moderate activity - For 30 minutes at a time								Total
	no answer	not at all	less than one day a week	one day a week	two days a week	three days a week	four days a week	five days or more	
no answer	69 37.5%	44 23.9%	15 8.2%	10 5.4%	10 5.4%	5 2.7%	5 2.7%	26 14.1%	184 100.0%
I am currently physically active and have been for some time	591 20.4%	173 6.0%	80 2.8%	169 5.8%	292 10.1%	386 13.3%	267 9.2%	946 32.6%	2904 100.0%
I am currently physically active but have only recently begun	25 10.7%	13 5.6%	5 2.1%	24 10.3%	30 12.9%	45 19.3%	26 11.2%	65 27.9%	233 100.0%
I am physically active once in a while, but not regularly	125 11.6%	135 12.6%	170 15.8%	130 12.1%	154 14.4%	116 10.8%	80 7.5%	163 15.2%	1073 100.0%
I was physically active in the past but not now	71 9.2%	263 34.1%	108 14.0%	72 9.3%	56 7.3%	51 6.6%	31 4.0%	119 15.4%	771 100.0%
I am not physically active, but have been thinking about becoming so	5 4.9%	36 35.3%	20 19.6%	9 8.8%	9 8.8%	10 9.8%	6 5.9%	7 6.9%	102 100.0%
I am not physically active	33 9.1%	213 58.8%	24 6.6%	26 7.2%	19 5.2%	22 6.1%	1 .3%	24 6.6%	362 100.0%
don't know / not sure	27 15.8%	54 31.6%	18 10.5%	11 6.4%	8 4.7%	11 6.4%	7 4.1%	35 20.5%	171 100.0%
Total	946 16.3%	931 16.1%	440 7.6%	451 7.8%	578 10.0%	646 11.1%	423 7.3%	1385 23.9%	5800 100.0%