

HEALTH LIFESTYLE SURVEY FOR THE STATES OF GUERNSEY

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1. AIMS

The 1993 Health Lifestyle Survey 'You and Your Health' was undertaken to provide information, on various social health topics on the people of Guernsey, to assist the Health Promotion Unit in its education campaigns.

'You and Your Health' asked questions on topics including: smoking, diet, exercise, drinking habits, sleep and stress, and uptake of various health services. The analysis and report was undertaken by Steven A. Julious and Michael J. Campbell, Medical Statistics and Computing, in the University of Southampton School of Medicine.

2. METHODOLOGY

Sample Design

The sample was taken from the three G.P. practices on Guernsey: l'Aumone and St. Sampson's Medical Practice; the Health Care Group; and the Queens Road Medical Practice. A total sample of 1000 patients who were 18 or over was taken from the three practices, with 334 patients taken from the first practice, and 333 from the second and third.

A systematic random sample was taken from each practice, with approximately every fortieth person sampled. This sample was taken between the dates 25.10.93 and 29.10.93.

The questionnaires were posted to the addresses chosen on 2.11.93 with a business paid envelope for replies enclosed. A reminder was sent to those patients who had not replied on 16.11.93 and data from replies was collected until 31.01.94.

Response

The initial response rate was 44% (414), rising to 68% (640) after a reminder. One usually expects $\frac{2}{3}$ of the sample population to reply, and a 50% improvement in response with a reminder⁽¹⁾ and so these findings are consistent with previous work.

A full breakdown of the response rate is given given in Tables 2.1 and 2.2. Despite the sample being drawn from adults registered at each practice, 5 patients under the age of 18 were sent a questionnaire. All 5 patients were female, 3 of whom were pregnant; this corresponds to 11 pregnancies out of 167 women under the age of 45.

Table 2.1 - Breakdown of Response Rate

Questionnaires	Response Rate	
	Number	Percentage
Before Reminder	414	44%
After Reminder	633	68%
Non-Response	304	32%
Total	937	100%

Table 2.2 - Breakdown of Patients not included in calculation of Response Rate

	Number
People who received Questionnaire	937
Deceased	14
Gone Away	20
Not at Address	11
Unknown	1
Address incomplete	1
No longer on Island	1
Returned blank forms	9
<18 years	5
From Alderney	1
Total	1000

References

1. Campbell M J and Waters W E. Does anonymity increase response rate in postal questionnaire surveys about sensitive subjects : A randomised trial. J. Epid. Comm. Health, 1990, 44 : 75-76.

3. DEMOGRAPHY OF THE SAMPLE POPULATION

Table 3.1 gives the demographic breakdown of the sample population. As the sample was taken from G.P. practice lists there may be some bias in the sample as, say, people who have never been ill may not have registered.

The distribution between the different age categories seems fairly constant, although there is a greater proportion of women (56%) in the sample than men (44%). However, from Table 3.2, one can see that sex and age are not associated in our sample (Pearson $\chi^2 = 4.66$, df = 5, p = 0.46) although, as one may suspect, there is a higher proportion of women aged 65 and over than men.

Table 3.1 - Demographic Questions about Person

	Frequency	Percent	(Census)
Age Categories			
18 to 24	72	11.5%	(14.5%)
25 to 24	122	19.4%	(19.6%)
35 to 44	109	17.4%	(18.6%)
45 to 54	93	14.8%	(14.6%)
55 to 64	94	15.0%	(12.8%)
65+	138	22.0%	(19.8%)
Total	628	100.0%	
What sex are you			
Male	275	43.6%	(47.3%)
Female	356	56.4%	(52.7%)
Total	631	100.0%	
What is your married status			
Single (never married)	107	17.1%	(21.6%)
Married or living as married	412	65.7%	(62.1%)
Widowed	65	10.4%	(9.5%)
Divorced or separated	43	6.9%	(6.9%)
Total	627	100.0%	
What type of housing do you live in			
Own home or buying	434	69.3%	(58.8%)
States housing	60	9.6%	(8.9%)

	Frequency	Percent	(Census)
Private rental	89	14.2%	(18.2%)
Other	43	6.9%	(14.0%)
Total	626	100.0%	
Which best describes your present position about work			
Retired	143	23.9%	
Registered Unemployed	11	1.8%	
Employed	293	48.9%	
Self-employed	60	10.0%	
Looking after the home or family	70	11.7%	
Student	17	2.8%	
Other	5	0.8%	
Total	599	100.0%	

Table 3.2 - Sex by Age

Age Categories	What Sex Are You				Row Total	(Census)
	Male	(Census)	Female	(Census)		
18 to 24	29		43		72	
	(10.6%)	(14.5%)	(12.1%)	(14.6%)	(11.5%)	(19.5%)
25 to 34	57		65		122	
	(20.9%)	(20.5%)	(18.3%)	(18.9%)	(19.4%)	(19.6%)
35 to 44	50		59		109	
	(18.3%)	(19.7%)	(16.6%)	(17.6%)	(17.4%)	(18.6%)
45 to 54	37		56		93	
	(13.6%)	(15.5%)	(15.8%)	(13.7%)	(14.8%)	(14.5%)
55 to 64	47		47		94	
	(17.2%)	(13.0%)	(13.2%)	(12.6%)	(15.0%)	(12.8%)
65+	53		85		138	
	(19.4%)	(16.8%)	(23.9%)	(22.5%)	(22.0%)	(19.8%)
Column Total	273		355		628	
	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)

Tables 3.3 to 3.5 give the breakdown of the trade recorded by each person in the survey; first for everyone (Table 3.3) and then for men (Table 3.4) and women (Table 3.5). As one may have suspected

there is a distinct difference between the sexes, with proportionally more women not economically active.

Tables 3.6 and 3.7 give similar breakdowns but by occupation.

Table 3.3 - Breakdown of trade for all people

	Frequency	Percent	(Census)
Trade, industry in which you are now working			
Horticulture	14	(2.2%)	(2.7%)
Other Primary	53	(8.4%)	(1.3%)
Manufacturing	10	(1.6%)	(3.2%)
Construction	26	(4.1%)	(5.4%)
Transport	16	(2.5%)	(2.3%)
Hostelry	18	(2.8%)	(4.3%)
Finance	72	(11.4%)	(8.1%)
All Services	44	(7.0%)	(14.4%)
All Public	26	(4.1%)	(8.8%)
Non Economically Active	343	(54.2%)	(48.8%)
N/A or Not Adequately Described	11	(1.7%)	-
Other Active	0	-	(0.7%)
Total	633	(100.0%)	(100.0%)

Table 3.4 - Breakdown of trade for Men

	Frequency	Percent	(Census)
Trade, industry in which you are now working			
Horticulture	10	(3.6%)	(2.8%)
Other Primary	28	(10.2%)	(2.4%)
Manufacturing	7	(2.5%)	(2.4%)
Construction	23	(8.4%)	(10.5%)
Transport	9	(3.3%)	(3.7%)
Hostelry	10	(3.6%)	(9.1%)
Finance	33	(12.0%)	(7.4%)
All Services	24	(8.7%)	(16.8%)
All Public	10	(3.6%)	(7.6%)
Non Economically Active	114	(41.5%)	(39.4%)
N/A or Not Adequately Described	7	(2.5%)	-
Other Active	0	-	(0.8%)
Total	275	(100.0%)	(100.0%)
	633		

Table 3.5 - Breakdown of trade for Women

	Frequency	Percent	(Census)
Trade, industry in which you are now working			
Horticulture	4	(1.1%)	(2.5%)
Other Primary	25	(7.0%)	(0.4%)
Manufacturing	3	(0.8%)	(2.1%)
Construction	3	(0.8%)	(0.7%)
Transport	7	(2.0%)	(1.0%)
Hostelry	8	(2.2%)	(4.6%)
Finance	39	(11.0%)	(8.7%)
All Services	20	(5.6%)	(12.2%)
All Public	16	(4.5%)	(9.9%)
Non Economically Active	227	(63.8%)	(57.4%)
N/A or Not Adequately Described	4	(1.1%)	-
Other Active	0	-	(0.6%)
Total	356	(100.0%)	(100.0%)

Table 3.6 - Breakdown of occupation for Men

	Frequency	Percent
Title/description of job you have now		
Growers	4	(1.4%)
Gardeners	4	(1.4%)
Fisherman	2	(0.7%)
Electronic Manufacturing	1	(0.4%)
Quarrying	1	(0.4%)
Electrician	4	(1.4%)
Plumber	1	(0.4%)
Carpenter/Joiner	5	(1.8%)
Roofer/Glazier	4	(1.4%)
Skilled Manual Worker	11	(4.0%)
Unskilled Manual Worker	6	(2.2%)
Architect/Surveyor/Draughtsman	2	(0.7%)
Qualified Engineer	5	(1.8%)
Warehouseman	5	(1.8%)
Driver	7	(2.5%)
Automotive Service	3	(1.1%)
Air Transport Worker	3	(1.1%)
Sea Transport Worker	1	(0.4%)
Accommodation and Catering Worker	2	(0.7%)
Sales Manager	3	(1.1%)
Sales Worker	5	(1.8%)
Skilled Service Worker	5	(1.8%)
Unskilled Service Worker	11	(4.0%)
Accountant	2	(0.7%)
Bank/Finance Worker	3	(1.1%)
Systems Analyst/Computer Programmer	1	(0.4%)
Medical Profession	17	(6.2%)
Teacher	6	(2.2%)
Manager	41	(14.9%)
General Office Staff	8	(2.9%)
Secretarial/Typing Staff	3	(1.1%)
Civil Servant/General Administration	5	(1.8%)
Police/Fire/Ambulance Staff	5	(1.8%)
Postal Worker	3	(1.1%)
Telecommunications Worker	1	(0.4%)
N/A or Not Adequately Described	4	(1.4%)
Economically Inactive	82	(29.7%)
Total	276	(100.0%)

Table 3.7 - Breakdown of occupation for Women

	Frequency	Percent
Title/description of job you have now		
Growers	1	(0.3%)
Electronic Manufacturing	1	(0.3%)
Unskilled Manual Worker	4	(1.1%)
Architect/Surveyor/Draughtsman	1	(0.3%)
Air Transport Worker	3	(0.8%)
Sea Transport Worker	2	(0.6%)
Accommodation and Catering Manager	3	(0.8%)
Accommodation and Catering Worker	2	(0.6%)
Sales Worker	3	(0.8%)
Skilled Service Worker	13	(3.6%)
Unskilled Service Worker	26	(7.2%)
Accountant	5	(1.4%)
Bank/Finance Worker	4	(1.1%)
Medical Profession	27	(7.5%)
Teacher	8	(2.2%)
Manager	27	(7.5%)
General Office Staff	20	(5.5%)
Secretarial/Typing Staff	12	(3.3%)
Civil Servant/General Administration	7	(1.9%)
N/A or Not Adequately Described	4	(1.1%)
Economically Inactive	188	(52.1%)
Total	361	(100.0%)

Table 3.8 gives a breakdown of the parish recorded.

Table 3.8 - Parish Recorded

	Frequency	Percent	(Census)
Please record your parish			
Castel	63	(14.5%)	(15.5%)
Forest	12	(2.8%)	(2.4%)
St. Andrews	19	(4.4%)	(4.0%)
St. Martins	50	(11.5%)	(10.3%)
St. Peter Port	116	(26.7%)	(28.4%)
St. Peter in the Wood	3	(0.07%)	(3.8%)
St. Sampsons	65	(15.0%)	(13.7%)
St. Saviours	24	(5.5%)	(4.1%)
Torteval	9	(2.1%)	(1.6%)
Vale	73	(16.8%)	(16.2%)
Total	434	(100.0%)	(100.0%)

4. SMOKING

Smoking

Each person in the survey was asked a series of questions on topics related to smoking.

The smoking categories in the analyses were broken down as follows:-

- 1) Smoker
- 2) Ex-smoker
- 3) Never smoked, or seldom used to smoke

With smokers categorised into:-

- 1) Light smoker (less than 5 a day)
- 2) Medium smoker (between 5 and 20)
- 3) Heavy smoker (over 20)
- 4) Pipe or cigar smoker

Smokers in the sample were asked about the extent of their habit, whether they would like to give up, and factors that would assist in giving up.

All people were then asked a number of questions on reasons not to smoke, smoking and health, and opinions concerning smoking restrictions.

Smoking Patterns by Age and Sex

In the survey sample, 73.6% of the people were non or ex-smokers. However, this prevalence differed both in relation to sex (Pearson $\chi^2 = 14.17$, degrees of freedom [df] = 2, p <0.001), with 31% (95% CI = 25% to 37%) of men claiming to be smokers compared to just 23% (95% CI = 18% to 28%) of women (Table 4.1), and probably most alarmingly by age ($\chi^2 = 38.10$, df = 10, p <0.001). Smoking when broken down by age seems to decrease in prevalence proportional to age, with 42% (95% CI = 29% to 54%) of people less than 24 years stating themselves to be smokers, falling to just 15% (95% CI = 9% to 21%) for people aged 65 and over (Table 4.2 and Figure 4.1). This decrease could be explained by a

number of factors. One could argue that the health awareness message concerning smoking may not be getting across to young people. This same message, it could be argued, is being taken up by older people, amongst whom the proportion of ex-smokers increases with age although, of course, one must have smoked whilst young to be an ex-smoker when old. Other factors to explain this falling prevalence could be that smokers die younger than non-smokers, and so the proportion of those smoking will decrease with age, especially among older people. A final factor could be that smoking until the most recent generation was unfashionable among women, and so with not many older women smoking, the total smoking proportion will fall.

This last statement may be confirmed by Tables 4.3 and 4.4, and Figure 4.1, where only 10% (95% CI = 4% to 19%) of women over the age of 65 smoke, under half the proportion for all women. The smoking trends by age for each sex seem to be similar to that observed for all people, although for women under 35 there is a higher prevalence of smoking compared to men, against the overall figure of a higher prevalence amongst men. This comparison is particularly marked for women under 25, among whom 43% (95% CI = 27% to 59%) smoke, nearly twice the overall proportion for women.

Table 4.1 - Smoking by Age

Age Categories	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
18 to 24	27 (41.5%)	8 (12.3%)	30 (46.2%)	65 (100.0%)
25 to 34	38 (32.8%)	18 (15.5%)	60 (51.7%)	116 (100.0%)
35 to 44	27 (27.0%)	29 (29.0%)	44 (44.0%)	100 (100.0%)
45 to 54	25 (28.7%)	14 (16.1%)	48 (55.2%)	87 (100.0%)
55 to 64	16 (19.3%)	25 (30.1%)	42 (50.6%)	83 (100.0%)
65+	18 (14.9%)	46 (38.0%)	57 (47.1%)	121 (100.0%)
Column Total	151 (26.4%)	140 (24.5%)	281 (49.1%)	572 (100.0%)

Figure 4.1 Percentage smoking broken down by age for men and women

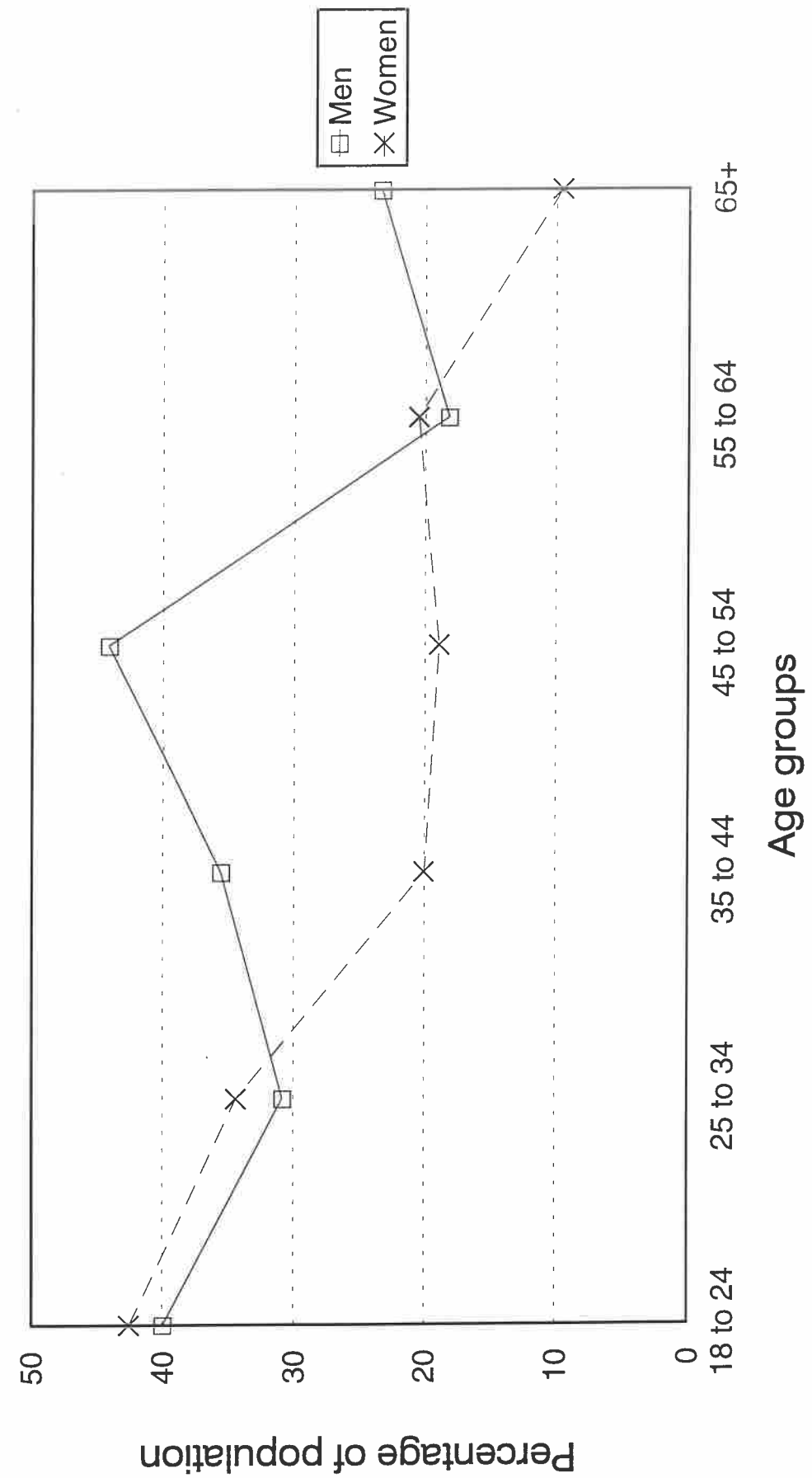


Table 4.2 - Smoking by Sex

What Sex are you?	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
Male	78 (31.0%)	73 (29.0%)	101 (40.1%)	252 (100.0%)
Female	74 (23.0%)	68 (21.1%)	180 (55.9%)	322 (100.0%)
Column Total	152 (26.5%)	141 (24.6%)	281 (49.0%)	574 (100.0%)

Table 4.3 - Smoking by Age for Men

Age Categories	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
18 to 24	10 (40.0%)	2 (8.0%)	13 (52.0%)	25 (100.0%)
25 to 34	17 (30.9%)	8 (14.5%)	30 (54.5%)	55 (100.0%)
35 to 44	16 (35.6%)	13 (28.9%)	16 (35.6%)	45 (100.0%)
45 to 54	15 (44.1%)	5 (14.7%)	14 (41.2%)	34 (100.0%)
55 to 64	8 (18.2%)	16 (36.4%)	20 (45.5%)	44 (100.0%)
65+	11 (23.4%)	28 (59.6%)	8 (17.0%)	47 (100.0%)
Column Total	77 (30.8%)	72 (28.8%)	101 (40.4%)	250 (100.0%)

Table 4.4 - Smoking by Age for Women

Age Categories	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
18 to 24	17 (42.5%)	6 (15.0%)	17 (42.5%)	40 (100.0%)
25 to 34	21 (34.4%)	10 (16.4%)	30 (49.2%)	61 (100.0%)
35 to 44	11 (20.0%)	16 (29.1%)	28 (50.9%)	55 (100.0%)
45 to 54	10 (18.9%)	9 (17.0%)	34 (64.2%)	53 (100.0%)
55 to 64	8 (20.5%)	9 (23.1%)	22 (56.4%)	39 (100.0%)
65+	7 (9.5%)	18 (24.3%)	49 (66.2%)	74 (100.0%)
Column Total	74 (23.0%)	68 (21.1%)	180 (55.9%)	322 (100.0%)

Giving Up Smoking

The majority of smokers in the study would like to give up (54%), with the greatest majority appearing amongst light (68%) and heavy (67%) smokers. Table 4.5 gives the full breakdown of figures. The proportion that one may find most encouraging is the proportion of smokers who do not wish to give up, 17.3% overall, and just 11.4% of medium smokers.

There are not really any factors which would assist smokers in giving up (Table 4.6). The strongest factor would seem to be an individual's willpower (62%), although a sizeable minority stated that advice from their doctor (25%) and treatment prescribed by their doctor (28%) would also help.

Table 4.5 - Whether Person Would Like to Give Up Smoking

	Would you like to give up smoking?			Row Total
	Yes	No	Not Sure	
Level of Smoking				
Light Smoker	13 (68.4%)	4 (21.1%)	2 (10.5%)	19 (100.0%)
Medium Smoker	45 (51.1%)	10 (11.4%)	33 (37.5%)	88 (100.0%)
Heavy Smoker	22 (66.7%)	6 (18.2%)	5 (15.2%)	33 (100.0%)
Pipe or Cigar Smoker	1 (10.0%)	6 (60.0%)	3 (30.0%)	10 (100.0%)
Column Total	81 (54.0%)	26 (17.3%)	43 (28.7%)	150 (100.0%)

Table 4.6 - Factors That Would Assist in Giving Up Smoking

	Frequency	Percent
Restrictions on sale	10	6.5%
Yes	144	93.5%
No		
	154	100.0%
Total		
More tax on cigarettes	4	2.6%
Yes	150	97.4%
No		
	154	100.0%
Total		
Advice from doctor	38	24.7%
Yes	116	75.3%
No		
	154	100.0%
Total		
Restrictions on smoking in public places	17	11.0%
Yes	137	89.0%
No		
	154	100.0%
Total		
Encouragement and support from close family	26	16.9%
Yes	128	83.1%
No		
	154	100.0%
Total		

	Frequency	Percent
Encouragement and support from friends at work		
Yes	9	5.8%
No	145	94.2%
Total	154	100.0%
Encouragement and support from other close friends		
Yes	10	6.5%
No	144	93.5%
Total	154	100.0%
An organised 'stop smoking group'		
Yes	11	7.1%
No	143	92.9%
Total	154	100.0%
A booklet offering advice and practical tips		
Yes	16	10.4%
No	138	89.6%
Total	154	100.0%
Drugs/nicotine patches prescribed by doctor		
Yes	43	27.9%
No	111	72.1%
Total	154	100.0%
Your own willpower		
Yes	96	62.3%
No	58	37.7%
Total	154	100.0%
Help from an alternative therapist		
Yes	27	17.5%
No	127	82.5%
Total	154	100.0%
Other things		
Yes	6	3.9%
No	148	96.1%
Total	154	100.0%

Reasons for Giving Up Smoking

A number of reasons were given for people to give up smoking, and here we have tabulated the responses (Table 4.7). For each reason given, smokers, ex-smokers and non-smokers tended to agree on its importance but a greater proportion of non- or ex-smokers would classify it as important. For example, 62% of smokers thought that it is important to give up to set a good example to family, which is a good majority, but 82% of ex-smokers and 87% of people who never smoked shared this opinion. A difference in proportions which is highly significant (Pearson $\chi^2 = 36.81$, df = 4, p <0.001).

Other reasons where there was a significant difference were: to respect the wishes of non-smokers ($\chi^2 = 30.31$, df = 4, p <0.001), which 66% of non-smokers thought to be a good reason as opposed to 40% of smokers; to be sociable ($\chi^2 = 17.45$, df = 4, p = 0.002); and finally to be more attractive ($\chi^2 = 14.71$, df = 2, p = 0.005).

Table 4.7 - Reasons for Giving Up Smoking

Reason	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
To prevent disease and ill health				
Important	133 (93.0%)	130 (98.5%)	243 (97.6%)	506 (96.6%)
Not Important	3 (2.1%)	1 (0.8%)	3 (1.2%)	7 (1.3%)
Not Sure	7 (4.9%)	1 (0.8%)	3 (1.2%)	11 (2.1%)
Column Total	143 (100.0%)	132 (100.0%)	249 (100.0%)	524 (100.0%)

To improve fitness				
Important	111 (84.1%)	110 (90.2%)	220 (91.7%)	441 (89.3%)
Not Important	15 (11.4%)	7 (5.7%)	13 (5.4%)	35 (7.1%)
Not Sure	6 (4.5%)	5 (4.1%)	7 (2.9%)	18 (3.6%)
Column Total	132 (100.0%)	122 (100.0%)	240 (100.0%)	494 (100.0%)
To set a good example to family				
Important	81 (61.8%)	94 (81.7%)	209 (87.1%)	384 (79.0%)
Not Important	36 (27.5%)	15 (13.0%)	16 (6.7%)	67 (13.8%)
Not Sure	14 (10.7%)	6 (5.2%)	15 (6.3%)	35 (7.2%)
Column Total	131 (100.0%)	115 (100.0%)	240 (100.0%)	486 (100.0%)
To Save Money				
Important	75 (58.1%)	61 (53.0%)	131 (55.3%)	267 (55.5%)
Not Important	44 (34.1%)	44 (38.3%)	77 (32.5%)	165 (34.3%)
Not Sure	10 (7.8%)	10 (8.7%)	29 (12.2%)	49 (10.2%)
Column Total	129 (100.0%)	115 (100.0%)	237 (100.0%)	481 (100.0%)
To demonstrate self control				
Important	58 (46.0%)	58 (51.3%)	117 (50.2%)	233 (49.4%)
Not Important	51 (40.5%)	45 (39.8%)	81 (34.8%)	177 (37.5%)
Not Sure	17 (13.5%)	10 (8.8%)	35 (15.0%)	62 (13.1%)
Column Total	126 (100.0%)	113 (100.0%)	233 (100.0%)	472 (100.0%)

To respect the wishes of non-smokers				
Important	53 (39.8%)	68 (59.6%)	156 (65.5%)	277 (57.1%)
Not Important	61 (45.9%)	26 (22.8%)	52 (21.8%)	139 (28.7%)
Not Sure	19 (14.3%)	20 (17.5%)	30 (12.6%)	69 (14.2%)
Column Total	133 (100.0%)	114 (100.0%)	238 (100.0%)	485 (100.0%)
To be sociable				
Important	37 (28.7%)	44 (38.9%)	111 (47.8%)	192 (40.5%)
Not Important	77 (59.7%)	50 (44.2%)	88 (37.9%)	215 (45.4%)
Not Sure	15 (11.6%)	19 (16.8%)	33 (14.2%)	67 (14.1%)
Column Total	129 (100.0%)	113 (100.0%)	232 (100.0%)	474 (100.0%)
To be more attractive				
Important	22 (17.3%)	27 (24.1%)	82 (35.5%)	131 (27.9%)
Not Important	84 (66.1%)	66 (58.9%)	119 (51.5%)	269 (57.2%)
Not Sure	21 (16.5%)	19 (17.0%)	30 (13.0%)	70 (14.9%)
Column Total	127 (100.0%)	112 (100.0%)	231 (100.0%)	470 (100.0%)

Smoking and Health

For each of the questions relating to health the three smoking categories tended to agree that smoking was detrimental. For example, 76% of smokers agreed that smoking was related to cancer, 60% concurred with the statement that it affected the health of one's family, and 47% accepted that colleagues at work had their health affected. However, they differed significantly from the other two categories (Kruskal-Wallis $\chi^2 = 53.12$, df = 2, p <0.001; $\chi^2 = 88.37$, df = 2, p <0.001; and $\chi^2 = 102.75$, df = 2, p

<0.001 respectively for the three statements) in that, although they tended to agree with each statement, the other two categories agreed more strongly (Table 4.8). For example, 76% of smokers, as stated above, agreed with the statement linking smoking to lung cancer but only 34% strongly agreed; whereas 91% of non-smokers agreed, of whom 68% strongly agreed.

Table 4.8 - Smoking Habits by Questions on Health

	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
Lung cancer is linked to smoking				
Strongly agree	52 (34.2%)	91 (66.9%)	183 (68.3%)	326 (58.6%)
Agree	64 (42.1%)	32 (23.5%)	60 (22.4%)	156 (28.1%)
Uncertain	31 (20.4%)	11 (8.1%)	25 (9.3%)	67 (12.1%)
Disagree	2 (1.3%)	2 (1.5%)	0 (0.0%)	4 (0.7%)
Strongly disagree	3 (2.0%)	0 (0.0%)	0 (0.0%)	3 (0.5%)
Column Total	152 (100.0%)	136 (100.0%)	268 (100.0%)	556 (100.0%)
Smoking can affect the health of a smoker's family				
Strongly agree	32 (22.1%)	70 (53.0%)	167 (62.8%)	269 (49.5%)
Agree	55 (37.9%)	47 (35.6%)	80 (30.1%)	182 (33.5%)
Uncertain	50 (34.5%)	13 (9.8%)	19 (7.1%)	82 (15.1%)
Disagree	6 (4.1%)	2 (1.5%)	0 (0.0%)	8 (1.5%)
Strongly disagree	2 (1.4%)	0 (0.0%)	0 (0.0%)	2 (0.4%)
Column Total	145 (100.0%)	132 (100.0%)	266 (100.0%)	543 (100.0%)

	Smoking Habit			Raw Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
Smoking can affect the health of a smoker's colleagues at work				
Strongly agree	20 (14.0%)	58 (43.9%)	148 (56.5%)	226 (42.1%)
Agree	47 (32.9%)	51 (38.6%)	80 (30.5%)	178 (33.1%)
Uncertain	57 (39.9%)	20 (15.2%)	32 (12.2%)	109 (20.3%)
Disagree	15 (10.5%)	3 (2.3%)	2 (0.8%)	20 (3.7%)
Strongly disagree	4 (2.8%)	0 (0.0%)	0 (0.0%)	4 (0.7%)
Column Total	143 (100.0%)	132 (100.0%)	262 (100.0%)	537 (100.0%)

Smoking and Restrictions

Table 4.9 gives the breakdown of opinion on smoking restrictions. Here non-smokers and ex-smokers tend to differ quite strongly from smokers in their opinion on the degree of restrictions on smokers. Smokers are less likely to want restrictions on buses, in cafes and restaurants, in banks and post offices, at the cinema, in public houses and hospitals ($\chi^2 = 39.57$, $df = 2$, $p < 0.001$; $\chi^2 = 125.50$, $df = 2$, $p < 0.001$; $\chi^2 = 12.18$, $df = 2$, $p < 0.002$; $\chi^2 = 45.63$, $df = 2$, $p < 0.001$; $\chi^2 = 120.65$, $df = 2$, $p < 0.001$; and $\chi^2 = 27.88$, $df = 2$, $p < 0.001$ respectively), seeming to prefer the status quo, while non- and ex-smokers want greater restrictions.

Table 4.9 - A Breakdown of Opinions on Smoking Restrictions by Smoking Category

Smoking Restrictions	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
On Buses				
More restrictions	54 (36.7%)	78 (58.2%)	178 (67.4%)	310 (56.9%)
About the same	85 (57.8%)	54 (40.3%)	85 (32.2%)	224 (41.1%)
Fewer restrictions	8 (5.4%)	2 (1.5%)	1 (0.4%)	11 (2.0%)
Column Total	147 (100.0%)	134 (100.0%)	264 (100.0%)	545 (100.0%)
In Restaurants and Cafes				
More restrictions	39 (26.7%)	88 (64.7%)	216 (80.6%)	343 (62.4%)
About the same	85 (58.2%)	47 (34.6%)	48 (17.9%)	180 (32.7%)
Fewer restrictions	22 (15.1%)	1 (0.7%)	4 (1.5%)	27 (4.9%)
Column Total	146 (100.0%)	136 (100.0%)	268 (100.0%)	550 (100.0%)
In Banks and Post Offices				
More restrictions	59 (41.0%)	60 (45.8%)	148 (56.3%)	267 (49.6%)
About the same	73 (50.7%)	68 (51.9%)	110 (41.8%)	251 (46.7%)
Fewer restrictions	12 (8.3%)	3 (2.3%)	5 (1.9%)	20 (3.7%)
Column Total	144 (100.0%)	131 (100.0%)	263 (100.0%)	538 (100.0%)
In Cinemas				
More restrictions	61 (42.4%)	80 (60.2%)	193 (73.9%)	334 (62.1%)
About the same	68 (47.2%)	51 (38.3%)	67 (25.7%)	186 (34.6%)
Fewer restrictions	15 (10.4%)	2 (1.5%)	1 (0.4%)	18 (3.3%)
Column Total	144 (100.0%)	133 (100.0%)	261 (100.0%)	538 (100.0%)

Smoking Restrictions	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
In Public Houses				
More restrictions	17 (11.7%)	60 (45.5%)	164 (62.4%)	241 (44.6%)
About the same	85 (58.6%)	63 (47.7%)	90 (34.2%)	238 (44.1%)
Fewer restrictions	43 (29.7%)	9 (6.8%)	9 (3.4%)	61 (11.3%)
Column Total	145 (100.0%)	132 (100.0%)	263 (100.0%)	540 (100.0%)
In Hospitals, Surgeries, etc.				
More restrictions	80 (54.1%)	97 (71.3%)	210 (78.1%)	387 (70.0%)
About the same	60 (40.5%)	38 (27.9%)	56 (20.8%)	154 (27.8%)
Fewer restrictions	8 (5.4%)	1 (0.7%)	3 (1.1%)	12 (2.2%)
Column Total	148 (100.0%)	136 (100.0%)	269 (100.0%)	553 (100.0%)

Smoking by Drinking and Weight

There seems from Table 4.10 to be a significant association between drinking and smoking (Pearson $\chi^2 = 24.75$, df = 10, p = 0.005), with smokers and ex-smokers more likely to be regular drinkers and non-smokers more likely to be tee-total.

Table 4.10 - Smoking by Drinking

How often do you drink Alcohol	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
Every day	17 (12.1%)	21 (15.6%)	14 (5.2%)	52 (9.6%)
On five or six days a week	11 (7.8%)	12 (8.9%)	16 (6.0%)	39 (7.2%)
On three or four days a week	31 (22.0%)	28 (20.7%)	38 (14.2%)	97 (17.9%)
On one or two days a week	32 (22.7%)	25 (18.5%)	62 (23.2%)	119 (21.9%)
Less than once a week	27 (19.1%)	27 (20.0%)	77 (28.8%)	131 (24.1%)
I don't drink alcohol at all	23 (16.3%)	22 (16.3%)	60 (22.5%)	105 (19.3%)
Column Total	141 (100.0%)	135 (100.0%)	267 (100.0%)	543 (100.0%)

Smokers, it appears, are less likely to be overweight (Table 4.11), with 59% of normal weight compared to just 39% of ex-smokers and 50% of non-smokers. This difference is significant (Kruskal-Wallis $\chi^2 = 9.73$, $df = 2$, $p = 0.008$) and would seem to confirm the adage that smoking keeps one's weight down, and a cessation of this habit would result in a mushrooming of one's weight. However, one must remember that age here is a confounding variable, with ex-smokers tending to be older (and heavier) and smokers younger (and lighter). The effect of age and weight is discussed in Chapter 7.

Table 4.11 - Smoking by Weight

Body Mass Index	Smoking Habit			Row Total
	Smoker	Ex-Smoker	Never or Seldom Smoked	
Underweight	15 (10.5%)	3 (2.3%)	24 (9.4%)	42 (8.0%)
Normal	70 (49.0%)	47 (36.4%)	103 (40.4%)	220 (41.7%)
Overweight	40 (28.0%)	62 (48.1%)	89 (34.9%)	191 (36.2%)
Obese	18 (12.6%)	17 (13.2%)	39 (15.3%)	74 (14.0%)
Column Total	143 (100.0%)	129 (100.0%)	255 (100.0%)	527 (100.0%)

5. DRINKING HABITS

People in the sample were asked questions pertaining to their drinking habits. People classified as regular drinkers, ie. consumers of alcohol on three or more days in a week, were asked about the quantity of alcohol consumed and whether they would like to reduce this quantity. If they would like to reduce their alcohol consumption they were then asked what factors might assist them.

Drinking Patterns

Thirty-four per cent of the study sample claimed to drink alcohol on three or more days of a given week (Table 5.1). There was a significant influence of age on drinking patterns (Pearson $\chi^2 = 111.36$, df = 25, p <0.001), with older people more likely to either not drink at all, or to drink more frequently if they consume alcohol.

Table 5.2 demonstrates a large difference between the sexes ($\chi^2 = 48.73$, df = 5, p <0.001), with women less likely to be regular drinkers, with 56% (95% CI = 51% to 61%) claiming to drink once a week or less compared to just 31% (95% CI = 25% to 36%) of men.

Drink Consumption

Those of whom claimed to drink on more than two days in a week were asked to detail the quantity of alcohol consumed on a typical drinking day. This figure was used in conjunction with how many days in a week a person drank to give an estimate of an individual's weekly alcohol consumption in units. This total figure was then recoded as within safe limits if 14 units or less were consumed by women and 21 units or less were consumed by men.

However, it must be noted that only people who drank on three or more days a week were asked about alcohol consumption. This is a flaw in the questionnaire as mid-week abstainers who drink heavily

Table 5.1 - Drinking by Age

How often do you drink alcohol?	Age Categories						Row Total
	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	
Every day	1 (1.5%)	2 (1.7%)	8 (8.2%)	9 (10.2%)	18 (20.2%)	18 (13.5%)	56 (9.5%)
On five or six days a week	4 (6.0%)	7 (6.0%)	10 (10.2%)	9 (10.2%)	3 (3.4%)	10 (7.5%)	43 (7.3%)
On three or four days a week	16 (23.9%)	22 (19.0%)	22 (22.4%)	15 (17.0%)	9 (10.1%)	18 (13.5%)	102 (17.3%)
On one or two days a week	24 (35.8%)	35 (30.2%)	27 (27.6%)	14 (15.9%)	16 (18.0%)	9 (6.8%)	125 (21.2%)
Less than once a week	17 (25.4%)	35 (30.2%)	25 (25.5%)	24 (27.3%)	20 (22.5%)	26 (19.5%)	147 (24.9%)
I don't drink alcohol at all	5 (7.5%)	15 (12.9%)	6 (6.1%)	17 (19.3%)	23 (25.8%)	52 (39.1%)	118 (20.0%)
Column Total	67 (100.0%)	116 (100.0%)	98 (100.0%)	88 (100.0%)	89 (100.0%)	133 (100.0%)	591 (100.0%)

at weekends have a more harmful drinking pattern than people who drink a little but often, a problem which becomes more apparent in the section on Drinking Styles later in this chapter. The statistics on alcohol consumption could be misrepresenting the people in the survey, a fact which must be taken on board in interpretation.

Table 5.3 gives the number of male and female drinkers who consume alcohol within safe limits. Eighty per cent of female drinkers drink within safe limits (95% CI = 69% to 88%) compared to just 53% (95% CI = 44% to 62%) of males, a significant difference (Table 5.4; Pearson $\chi^2 = 14.74$, df = 1, p <0.001). Safe drinking is also linked to age ($\chi^2 = 18.743$, df = 5, p = 0.002), with young people three times more likely not to be drinking within safe limits. This trend of safe limits by age was the same for both males (Table 5.5) and females (Table 5.6), with just 30% (95% CI = 7% to 65%) of young male drinkers drinking within safe limits (also Figure 5.2).

Heavy drinkers are more likely to claim to be drinking less alcohol than the previous year (Table 5.7; $\chi^2 = 6.631$, df = 2, p = 0.036) and to wish to cut down on their drinking (Table 5.8; $\chi^2 = 13.919$, df = 1, p <0.001), although no-one wished to give up completely. However, although 12% of drinkers overall, and 26% of heavy drinkers, said they'd like to cut down on the alcohol they consumed, there were no factors which people stated would help, apart from personal willpower which 75% of drinkers thought to be important. A sizeable minority thought advice from their doctor would be helpful (39%), and also encouragement from family, but after these there were no other factors.

Table 5.2 - Drinking by Sex

How often do you drink alcohol?	What Sex are You		Row Total
	Male	Female	
Every day	38 (14.5%)	19 (5.7%)	57 (9.6%)
On five or six days a week	30 (11.5%)	13 (3.9%)	43 (7.3%)
On three or four days a week	54 (20.6%)	48 (14.5%)	102 (17.2%)
On one or two days a week	60 (22.9%)	66 (19.9%)	126 (21.2%)
Less than once a week	48 (18.3%)	99 (29.9%)	147 (24.8%)
I don't drink alcohol at all	32 (12.2%)	86 (26.0%)	118 (19.9%)
Column Total	262 (100.0%)	331 (100.0%)	593 (100.0%)

Table 5.3 - Comparison of Sex and Safe Drinking Limits

What sex are you	Drinking Within Safe Limits?		Row Total
	Yes	No	
Male	63 (52.9%)	56 (47.1%)	119 (100.0%)
Female	63 (79.7%)	16 (20.3%)	79 (100.0%)
Column Total	126 (63.6%)	72 (36.4%)	198 (100.0%)

Table 5.4 - Comparison of Age and Safe Limits

Age Categories	Drinking Within Safe Limits?		Row Total
	Yes	No	
18 to 24	9 (47.4%)	10 (52.6%)	19 (100.0%)
25 to 34	17 (54.8%)	14 (45.2%)	31 (100.0%)
35 to 44	18 (45.0%)	22 (55.0%)	40 (100.0%)
45 to 54	25 (75.8%)	8 (24.2%)	33 (100.0%)
55 to 64	19 (67.9%)	9 (32.1%)	28 (100.0%)
65+	38 (82.6%)	8 (17.4%)	46 (100.0%)
Column Total	126 (64.0%)	71 (36.0%)	197 (100.0%)

Table 5.5 - Comparison of Age and Safe Limits for Males

Age Categories	Drinking Within Safe Limits?		Row Total
	Yes	No	
18 to 24	3 (30.0%)	7 (70.0%)	10 (100.0%)
25 to 34	6 (35.3%)	11 (64.7%)	17 (100.0%)
35 to 44	10 (38.5%)	16 (61.5%)	26 (100.0%)
45 to 54	14 (66.7%)	7 (33.3%)	21 (100.0%)
55 to 64	11 (57.9%)	8 (42.1%)	19 (100.0%)
65+	19 (76.0%)	6 (24.0%)	25 (100.0%)
Column Total	63 (53.4%)	55 (46.6%)	118 (100.0%)

Safe limits are less than or equal to 14 units per week for women and less than or equal to 21 units for men.

Table 5.6 - Comparison of Age and Safe Limits for Females

Age Categories	Drinking Within Safe Limits?		Row Total
	Yes	No	
18 to 24	6 (66.7%)	3 (33.3%)	9 (100.0%)
25 to 34	11 (78.6%)	3 (21.4%)	14 (100.0%)
35 to 44	8 (57.1%)	6 (42.9%)	14 (100.0%)
45 to 54	11 (91.7%)	1 (8.3%)	12 (100.0%)
55 to 64	8 (88.9%)	1 (11.1%)	9 (100.0%)
65+	19 (90.5%)	2 (9.5%)	21 (100.0%)
Column Total	63 (79.7%)	16 (20.3%)	79 (100.0%)

Table 5.7 - Comparison with Previous Year by Safe Limits

Compared with this time last year are you drinking the same	Drinking Within Safe Limits?		Row Total
	Yes	No	
More alcohol	13 (10.4%)	6 (8.3)	19 (9.6%)
Less alcohol	15 (12.0%)	19 (26.4%)	34 (17.3%)
About the same	97 (77.6%)	47 (65.3%)	144 (73.1%)
Column Total	125 (100.0%)	72 (100.0%)	197 (100.0%)

Table 5.8 - Whether a Person Would Like to Cut Back by Safe Limits

Would you like to change your present level of drinking	Drinking Within Safe Limits?		Row Total
	Yes	No	
No	113 (95.0%)	53 (76.8%)	166 (88.3%)
Yes	6 (5.0%)	16 (23.2%)	22 (11.7%)
Column Total	119 (100.0%)	69 (100.0%)	188 (100.0%)

Table 5.9 - Comparison with Previous Year by Sex

What sex are you	Compared with this time last year are you drinking the same?			Row Total
	More alcohol	About the same	Less alcohol	
Male	11 (8.3%)	93 (69.9%)	29 (21.8%)	133 (100.0%)
Female	11 (11.3%)	70 (72.2%)	16 (16.5%)	97 (100.0%)
Column Total	22 (9.6%)	163 (70.9%)	45 (19.6%)	230 (100.0%)

Table 5.10 - Comparison with Previous Year by Age

Age Categories	Compared with this time last year are you drinking the same?			Row Total
	More alcohol	About the same	Less alcohol	
18 to 24	10 (43.5%)	5 (21.7%)	8 (34.8%)	23 (100.0%)
25 to 34	6 (16.2%)	16 (43.2%)	15 (40.5%)	37 (100.0%)
35 to 44	3 (6.0%)	41 (82.0%)	6 (12.0%)	50 (100.0%)
45 to 54	2 (5.3%)	31 (81.6%)	5 (13.2%)	38 (100.0%)
55 to 64	0 (0.0%)	30 (96.8%)	1 (3.2%)	31 (100.0%)
65+	0 (0.0%)	40 (80.0%)	10 (20.0%)	50 (100.0%)
Column Total	21 (9.2%)	163 (71.2%)	45 (19.7%)	229 (100.0%)

Table 5.11 - Comparison with Previous Year by Age for Males

Age Categories	Compared with this time last year are you drinking the same?			Row Total
	More alcohol	About the same	Less alcohol	
18 to 24	4 (33.3%)	2 (16.7%)	6 (50.0%)	12 (100.0%)
25 to 34	3 (14.3%)	8 (38.1%)	10 (47.6%)	21 (100.0%)
35 to 44	1 (3.3%)	27 (90.0%)	2 (6.7%)	30 (100.0%)
45 to 54	2 (8.7%)	18 (78.3%)	3 (13.0%)	23 (100.0%)
55 to 64	0 (0.0%)	19 (100.0%)	0 (0.0%)	19 (100.0%)
65+	0 (0.0%)	19 (70.4%)	8 (29.6%)	27 (100.0%)
Column Total	10 (7.6%)	93 (70.5%)	29 (22.0%)	132 (100.0%)

Table 5.12 - Comparison with Previous Year by Age for Females

Age Categories	Compared with this time last year are you drinking the same?			Row Total
	More alcohol	About the same	Less alcohol	
18 to 24	6 (54.5%)	3 (27.3%)	2 (18.2%)	12 (100.0%)
25 to 34	3 (18.8%)	8 (50.0%)	5 (31.3%)	16 (100.0%)
35 to 44	2 (10.0%)	14 (70.0%)	4 (20.0%)	20 (100.0%)
45 to 54	0 (0.0%)	13 (86.7%)	2 (13.3%)	15 (100.0%)
55 to 64	0 (0.0%)	11 (91.7%)	1 (8.3%)	12 (100.0%)
65+	0 (0.0%)	21 (91.3%)	2 (8.7%)	23 (100.0%)
Column Total	11 (11.3%)	70 (72.2%)	16 (16.5%)	97 (100.0%)

Compared with the previous year most people who drink claim to be drinking about the same amount of alcohol. No factor seemed to influence whether a person had reduced alcohol consumption, with no differences amongst the sexes (Table 5.9; Pearson $\chi^2 = 1.400$, df = 2, p = 0.496) or the different age categories (Table 5.10; Kruskal-Wallis $\chi^2 = 8.014$, df = 5, p = 0.156). There was slight, although non significant, evidence of a trend between change in alcohol consumption and age for men (Table 5.11; $\chi^2 = 10.013$, df = 5, p = 0.075), with no evidence of a relationship for women (Table 5.12; $\chi^2 = 7.256$, df = 2, p = 0.201).

Drinking Style and Alcohol Consumption

Table 5.13 gives a breakdown of various drinking styles dependent both on the number of units drunk and the number of days in a week that a person drinks.

Table 5.13 - Explanation of Drinking Styles by Quantity and Frequency of Consumption

Frequency of Drinking	Number of Units Drunk in a Day		
	1 to 4	5 to 8	9 or more
Three or more days a week	Light (frequent)	Moderate	Heavy
Less than three days a week	<----- Light (infrequent) ----->		
Not at all	<----- Abstainer ----->		

However, as stated earlier in the chapter, only people who drink for more than three days a week were asked about the quantity they drink, and so some of the light (infrequent) drinkers may be in the wrong category.

There are consistent differences in the style of drinking within the survey population, with men consuming their alcohol in a significantly different manner to women (Table 5.14; Pearson $\chi^2 = 53.273$, df = 4, p <0.001). There are differences between the different ages (Table 5.15; Kruskal-Wallis $\chi^2 = 20.844$, df = 5, p = 0.001), with older people more likely to be abstainers. This trend is true both amongst men (Table 5.16; $\chi^2 = 11.837$, df = 5, p = 0.037) and women (Table 5.17; $\chi^2 = 16.431$, df = 5, p = 0.006), where the tendency for older people not to drink is most marked.

Table 5.14 - Drinking Style by Sex

What sex are you?	Style of Drinking				
	Abstainer	Light (Infrequent)	Light (Frequent)	Moderate	Heavy
Male	32 (12.4%)	108 (41.7%)	74 (28.6%)	29 (11.2%)	16 (6.2%)
Female	86 (26.1%)	165 (50.0%)	70 (21.2%)	7 (2.1%)	2 (0.6%)
Column Total	118 (20.0%)	273 (46.3%)	144 (24.4%)	36 (6.1%)	18 (3.1%)
					259 (100.0%)
					330 (100.0%)
					589 (100.0%)

Table 5.15 - Drinking Style by Age

Age Categories	Style of Drinking					Row Total
	Abstainer	Light (Infrequent)	Light (Frequent)	Moderate	Heavy	
18 to 24	5 (7.7%)	41 (63.1%)	9 (13.8%)	6 (9.2%)	4 (6.2%)	65 (100.0%)
25 to 34	15 (12.9%)	70 (60.3%)	18 (15.5%)	10 (8.6%)	3 (2.6%)	116 (100.0%)
35 to 44	6 (6.1%)	52 (53.1%)	25 (25.5%)	10 (10.2%)	5 (5.1%)	98 (100.0%)
45 to 54	17 (19.3%)	38 (43.2%)	27 (30.7%)	3 (3.4%)	3 (3.4%)	88 (100.0%)
55 to 64	23 (26.4%)	36 (41.4%)	22 (25.3%)	4 (4.6%)	2 (2.3%)	87 (100.0%)
65+	52 (39.1%)	35 (26.3%)	43 (32.3%)	3 (2.3%)	0 (0.0%)	133 (100.0%)
Column Total	118 (20.1%)	272 (46.3%)	144 (24.5%)	36 (6.1%)	17 (2.9%)	587 (100.0%)

Table 5.16 - Drinking Style by Age for Males

Age Categories	Style of Drinking					Row Total
	Abstainer	Light (Infrequent)	Light (Frequent)	Moderate	Heavy	
18 to 24	2 (7.4%)	15 (55.6%)	3 (11.1%)	4 (14.8%)	3 (11.1%)	27 (100.0%)
25 to 34	6 (11.3%)	30 (56.6%)	6 (11.3%)	8 (15.1%)	3 (5.7%)	53 (100.0%)
35 to 44	0 (0.0%)	20 (43.5%)	13 (28.3%)	8 (17.4%)	5 (10.9%)	46 (100.0%)
45 to 54	3 (8.6%)	11 (31.4%)	15 (42.9%)	3 (8.6%)	3 (8.6%)	35 (100.0%)
55 to 64	9 (20.5%)	16 (36.4%)	14 (31.8%)	4 (9.1%)	1 (2.3%)	44 (100.0%)
65+	12 (23.1%)	15 (28.8%)	23 (44.2%)	2 (3.8%)	0 (0.0%)	52 (100.0%)
Column Total	32 (12.5%)	107 (41.6%)	74 (28.8%)	29 (11.3%)	15 (5.8%)	257 (100.0%)

Table 5.17 - Drinking Style by Age for Females

Age Categories	Style of Drinking				
	Abstainer	Light (Infrequent)	Light (Frequent)	Moderate	Heavy
18 to 24	3 (7.9%)	26 (68.4%)	6 (15.8%)	2 (5.3%)	1 (2.6%)
25 to 34	9 (14.3%)	40 (63.5%)	12 (19.0%)	2 (3.2%)	0 (0.0%)
35 to 44	6 (11.5%)	32 (61.5%)	12 (23.1%)	2 (3.8%)	0 (0.0%)
45 to 54	14 (26.4%)	27 (50.9%)	12 (22.6%)	0 (0.0%)	0 (0.0%)
55 to 64	14 (32.6%)	20 (46.5%)	8 (18.6%)	0 (0.0%)	1 (2.3%)
65+	40 (49.4%)	20 (24.7%)	20 (24.7%)	1 (1.2%)	0 (0.0%)
Column Total	86 (26.1%)	165 (50.0%)	70 (21.2%)	7 (2.1%)	2 (0.6%)
					330 (100.0%)

6. EXERCISE

All the people in the survey were asked a series of questions concerning exercise, whether this be through work or in a person's free time. They were asked how often they exercised and if this had increased over the the past year and, if it had, whether there was a particular reason. People who felt they did not do enough exercise were asked if there were any reasons preventing them from doing so, and finally everyone completed questions concerning light exercise and their opinions on exercise related issues.

Levels of Vigorous Exercise

The majority of people in the survey do work which does not involve a large amount of physical activity (Table 6.1), with 78% of people doing only a little exercise through work or less.

Table 6.2 gives a breakdown of the amount of vigorous leisure activities the people in the survey reported themselves as having undertaken in the previous fortnight. As one may have suspected there are large age differences (Kruskal-Wallis $\chi^2 = 57.38$, $df = 5$, $p < 0.001$) with at least half the people under 25 doing a vigorous activity three times in the last fortnight and 25% doing at least six. There are sex differences in the distribution through age in that young males enjoy more exercise, at least half undertaking at least four tasks compared to just two tasks for half the young women, although there is no overall age difference ($\chi^2 = 0.35$, $df = 1$, $p = 0.556$).

Table 6.1 - Exercise Activity at Work

	Frequency	Percent
Which of the following best describes your work		
Usually sitting, do not walk around much	159	27.1%
I stand and walk about but I do not do much carrying	298	50.9%
I usually carry light loads or climb stairs or hills often	70	11.9%
I do heavy work or carry heavy loads often	59	10.1%
Total	586	100.0%

Table 6.2 - Amount of Exercise taken in previous fortnight

Age Category	Number	Median	Inter-Quartile Range	Kruskal-Wallis χ^2	df	p
18 to 24	68	3	0 to 6	57.28	5	<0.001
25 to 34	118	2.5	0 to 6			
35 to 44	103	0	0 to 4			
45 to 54	90	0	0 to 4			
55 to 64	88	0	0 to 4			
65+	119	0	0 to 0			
Total						
Males Only						
18 to 24	29	4	1.5 to 7	32.80	5	<0.001
25 to 34	55	3	0 to 7			
35 to 44	47	0	0 to 4			
45 to 54	37	0	0 to 4.5			
55 to 64	44	0	0 to 2.75			
65+	45	0	0 to 0			
Total						
Females Only						
18 to 24	39	2	0 to 6	27.34	5	<0.001
25 to 34	63	2	0 to 6			
35 to 44	56	0.5	0 to 4			
45 to 54	53	0	0 to 4			
55 to 64	44	0	0 to 4			
65+	74	0	0 to 0			

Inter-Quartile Range is the range of values that 25% and 75% of the group recorded.

Changes in Exercise

The majority of people have not changed their levels of vigorous exercise (Table 6.3), with 60% of people stating they are doing about the same. Eighteen percent recorded that they were doing less, while the same amount stated that they were doing more. Reasons for this increase are also given in Table 6.3, with the two most popular factors being to improve their appearance (28%) and for their health (39%).

Table 6.3 - Exercise Activity compared to previous year and reason for increase

	Frequency	Percent
Compared to last year are you doing different amounts of exercise		
I am doing more	104	17.7%
I am doing less	104	17.7%
I am doing about the same	354	60.4%
I am not sure	24	4.1%
Total	586	100.0%
Main reasons for changing the amount of sport and activities		
Mainly to improve your appearance	28	27.5%
Mainly for medical reasons	11	10.8%
Mainly for health reasons	40	39.2%
Mainly to train for sport	7	6.9%
Mainly for other reasons	16	15.7%
Total	102	100.0%

Levels of Light Exercise

Over half the people surveyed (52%) thought that they did not take enough exercise, with a further 8% not sure. People who thought their levels of exercise were not sufficient were asked to give any reasons that prevent them from taking more (Table 6.4 and Figure 6.1). The most common factor attributed to persons not exercising enough is lack of leisure time (40%), although 38% cited that they had no real incentive to exercise. No other factor was quoted to any large degree, although lack of money (14%) was one reason preventing them from doing more and 16% stated they suffered from an illness or disability.

Table 6.5 gives a breakdown of reasons for not exercising broken down by age (<45 and >45), accompanied by Figures 6.2 and 6.3, which are the six most common reasons for not exercising for the two age groups. There are no clear differences between the two groups, apart from younger people ranking lack of leisure time as more important, and older responders citing illness or disability more often. Similarly Table 6.6 and Figures 6.4 and 6.5 give reasons broken down by sex; again there are no real differences in the reasons given, although slightly more women (7%) cite lack of care facilities.

The amount of light exercise seems to increase proportionately with age (Table 6.6), with half of people over 65 spending greater than six hours per week on light activities compared to a median value of 4 for people under 25 (Kruskal-Wallis $\chi^2 = 20.18$, df = 5, p <0.001). This increase was particularly marked amongst males, with a maximum three fold difference between age groups ($\chi^2 = 28.09$, df = 5, p <0.001), with no discernable trend for women ($\chi^2 = 4.37$, df = 5, p <0.497). One possible explanation is that the example given of light exercise in the question, ie. do-it-yourself, gardening, bowling, one may consider as middle-aged male hobbies and hence a high preponderance amongst this group of people recording a large amount of time on these activities. However, there was no difference between the sexes ($\chi^2 = 0.38$, df = 1, p = 0.54).

Table 6.8 gives the response to questions concerning the use of an everyday item such as stairs, where people walk or run up them, or use them as an alternative to an elevator. Only 29% of those surveyed recorded that they do not run up stairs, and just 21% confessed to always using a lift or elevator if one was available.

Table 6.4 - Reasons for Not Exercising

	Frequency	Percent
Lack of leisure time		
Yes	155	39.5%
No	237	60.5%
Total	392	100.0%
Lack of money		
Yes	55	14.0%
No	337	86.0%
Total	392	100.0%
Lack of childcare facilities		
Yes	24	6.1%
No	368	93.9%
Total	392	100.0%

	Frequency	Percent
Lack of transport	19	4.8%
Yes	373	95.2%
No		
Total	392	100.0%
Lack of facilities at work	23	5.9%
Yes	369	94.1%
No		
Total	392	100.0%
Lack interesting, relevant activities	51	13.0%
Yes	341	87.0%
No		
Total	392	100.0%
Illness or Disability	61	15.6%
Yes	331	84.4%
No		
Total	392	100.0%
Lack of incentive	148	37.8%
Yes	244	62.2%
No		
Total	392	100.0%

Table 6.5 - Reasons for not Exercising by Age

Prevent taking Exercise:	Age Category		Row Total
	<44	>45	
Lack of leisure time			
Yes	115 (52.5%)	40 (23.7%)	155 (39.9%)
No	104 (47.5%)	129 (76.3%)	233 (60.1%)
Column Total	219 (100.0%)	169 (100.0%)	388 (100.0%)
Lack of money			
Yes	43	12	55

Prevent taking Exercise:	Age Category		Row Total
	<44	>45	
No	(19.6%) 176 (80.4%)	(7.1%) 157 (92.9%)	(14.2%) 333 (85.8%)
Column Total	219 (100.0%)	169 (100.0%)	388 (100.0%)
Lack of childcare facilities			
Yes	22 (10.0%)	2 (1.2%)	24 (6.2%)
No	197 (90.0%)	167 (98.8%)	364 (93.8%)
Column Total	219 (100.0%)	169 (100.0%)	388 (100.0%)
Lack of transport			
Yes	8 (3.7%)	11 (6.5%)	19 (4.9%)
No	211 (96.3%)	158 (93.5%)	369 (95.1%)
Column Total	219 (100.0%)	169 (100.0%)	388 (100.0%)
Lack of facilities at work			
Yes	14 (6.4%)	9 (5.3%)	23 (5.9%)
No	205 (93.6%)	160 (94.7%)	365 (94.1%)
Column Total	219 (100.0%)	169 (100.0%)	388 (100.0%)
Lack interesting, relevant activities			
Yes	29 (13.2%)	22 (13.0%)	51 (13.1%)
No	190 (86.8%)	147 (87.0%)	337 (86.9%)
Column Total	219 (100.0%)	169 (100.0%)	388 (100.0%)
Illness or disability			
Yes	21 (9.6%)	40 (32.7%)	61 (15.7%)
No	198	129	327

Prevent taking Exercise:	Age Category		Row Total
	<44	>45	
	(90.4%)	(76.3%)	(84.3%)
Column Total	219 (100.0%)	169 (100.0%)	388 (100.0%)
Lack of incentive			
Yes	83 (37.9%)	65 (38.5%)	148 (38.1%)
No	136 (62.1%)	104 (61.5%)	240 (61.9%)
Column Total	219 (100.0%)	169 (100.0%)	388 (100.0%)

Table 6.6 - Reasons for not Exercising by Sex

Prevent taking Exercise:	What sex are you?		Row Total
	Male	Female	
Lack of leisure time			
Yes	62 (44.0%)	93 (37.3%)	155 (39.7%)
No	79 (56.0%)	156 (62.7%)	235 (60.3%)
Column Total	141 (100.0%)	249 (100.0%)	390 (100.0%)
Lack of money			
Yes	19 (13.5%)	36 (14.5%)	55 (14.1%)
No	122 (86.5%)	213 (85.5%)	335 (85.9%)
Column Total	141 (100.0%)	249 (100.0%)	390 (100.0%)
Lack of childcare facilities			
Yes	6 (4.3%)	18 (7.2%)	24 (6.2%)
No	135 (95.7%)	231 (92.8%)	366 (93.8%)
Column Total	141 (100.0%)	249 (100.0%)	390 (100.0%)
Lack of transport			
Yes	3 (2.1%)	16 (6.4%)	19 (4.9%)
No	138 (97.9%)	233 (93.6%)	371 (95.1%)
Column Total	141 (100.0%)	249 (100.0%)	390 (100.0%)
Lack of facilities at work			
Yes	7 (5.0%)	16 (6.4%)	23 (5.9%)
No	134 (95.0%)	233 (93.6%)	367 (94.1%)
Column Total	141 (100.0%)	249 (100.0%)	390 (100.0%)

Prevent taking Exercise:	What sex are you?		Row Total
	Male	Female	
Lack interesting, relevant activities			
Yes	27 (19.1%)	24 (9.6%)	51 (13.1%)
No	114 (80.9%)	225 (90.4%)	339 (86.9%)
Column Total	141 (100.0%)	249 (100.0%)	390 (100.0%)
Illness or disability			
Yes	18 (12.8%)	43 (17.3%)	61 (15.6%)
No	123 (87.2%)	206 (82.7%)	329 (84.4%)
Column Total	141 (100.0%)	249 (100.0%)	390 (100.0%)
Lack of incentive			
Yes	54 (38.3%)	94 (37.8%)	148 (37.9%)
No	87 (61.7%)	155 (62.2%)	242 (62.1%)
Column Total	141 (100.0%)	249 (100.0%)	390 (100.0%)

Table 6.7 - Number of hours spent on light activities in a week

Age Category	Number	Median	Inter-Quartile Range	Kruskal-Wallis χ^2	df	p
18 to 24	62	4	2 to 7.25	20.18	5	<0.001
25 to 34	112	5	2 to 10			
35 to 44	98	5	3 to 10			
45 to 54	83	5	3 to 8			
55 to 64	79	8	4 to 12			
65+	97	6	2 to 18			
Total						
Males Only						
18 to 24	26	3	1.75 to 9.25	28.09	5	<0.001
25 to 34	52	34	1 to 8.75			
35 to 44	48	05	3 to 9.75			
45 to 54	35	05	3 to 8			
55 to 64	44	9.5	4 to 13.5			
65+	47	7	4 to 20			
Total						
Females Only						
18 to 24	36	4	2 to 7	4.37	5	<0.497
25 to 34	60	5	2.25 to 10			
35 to 44	50	5.5	2.75 to 10.25			
45 to 54	48	6	3 to 8			
55 to 64	35	6	4 to 8			
65+	50	5.5	1.75 to 12			

Inter-Quartile Range is the range of values that 25% and 75% of the group record.

Table 6.8 - Use of Stairs

	Frequency	Percent
Do you ever run up stairs		
Never or rarely	174	29.0%
Sometimes	223	37.1%
Often	204	33.9%
Total	601	100.0%
Do you ever walk up stairs when a lift is available		
Never or rarely	123	20.7%
Sometimes	226	38.0%
Often	245	41.2%
Total	594	100.0%

Factors influencing Exercise taken

Seventy-three percent of people enjoyed sport while they were at school (Table 6.9) and 69% stated that they had represented their schools at sports. Unfortunately, of the factors that may influence a person to continue sport into adulthood, only 25% of people stated that workplace showers were available, fewer still (16%) that they had access to free sports facilities at work.

Table 6.10 gives people's responses to nine statements that relate to either facts or beliefs concerning exercise, which may in turn influence whether people undertake exercise. Ninety-six per cent of people agree that exercise is good for staying in good health and 90% of people concur with the statement that it is a useful method of weight control. Although most people are unsure as to whether exercise increases one's life, and if the long term benefits outweigh short term risks, they do agree that it can keep one fit in one's old age (93%). Ninety-one per cent of people agree that exercise makes one feel better, though they are undecided whether vigorous exercise increases the risk of heart attacks.

Table 6.9 - Factors that may influence Exercise

	Frequency	Percent
Did you enjoy sports when you were at school		
Yes	443	72.9%
No	165	27.1%
Total	608	100.0%
Did you ever play in any school sports team in school years		
Yes	412	68.7%
No	188	31.3%
Total	600	100.0%
Does your place of work have showers available		
Yes	95	25.1%
No	284	74.9%
Total	379	100.0%
Do you have access to any free sports facilities with job		
Yes	76	15.6%
No	410	84.4%
Total	486	100.0%

Table 6.10 - Agreement with Statements about Exercise

	Frequency	Percent
Exercise is important for staying in good health		
Strongly agree	256	41.1%
Agree	335	54.1%
Uncertain	21	3.4%
Disagree	7	1.1%
Strongly disagree	0	0.0%
Total	619	100.0%
The amount of exercise has no effect on length of life		
Strongly agree	21	3.4%
Agree	127	20.9%
Uncertain	227	37.3%
Disagree	177	29.1%
Strongly disagree	57	9.4%

	Frequency	Percent
Total	609	100.0%
Exercise is useful for keeping one's weight down		
Strongly agree	184	29.9%
Agree	369	59.9%
Uncertain	45	7.3%
Disagree	16	2.6%
Strongly disagree	2	0.3%
Total	616	100.0%
Regular vigorous exercise increases risks of heart attacks		
Strongly agree	33	5.4%
Agree	83	13.5%
Uncertain	228	37.1%
Disagree	199	32.4%
Strongly disagree	72	11.7%
Total	615	100.0%
Remaining active can help to keep one fit in old age		
Strongly agree	245	39.8/5
Agree	329	53.4%
Uncertain	36	5.8%
Disagree	3	0.5%
Strongly disagree	3	0.5%
Total	616	100.0%
Leisure time exercise, eg. walking, gardening, are good ways of relaxing		
Strongly agree	262	42.7%
Agree	325	52.9%
Uncertain	23	3.7%
Disagree	1	0.2%
Strongly disagree	3	0.5%
Total	614	100.0%
Dangers are more important than benefits in later life		
Strongly agree	18	3.0%
Agree	125	20.7%
Uncertain	262	43.4%
Disagree	169	28.0%
Strongly disagree	30	5.0%
Total	604	100.0%
Exercise makes one feel better		
Strongly agree	200	32.7%

	Frequency	Percent
Agree	358	58.6%
Uncertain	43	7.0%
Disagree	10	1.6%
Strongly disagree	0	0.0%
Total	611	100.0%
It's more important to take exercise than to give up smoking		
Strongly agree	56	9.2%
Agree	97	15.9%
Uncertain	143	23.5%
Disagree	225	36.9%
Strongly disagree	88	14.4%
Total	609	100.0%

Figure 6.1 Reasons for Not Exercising

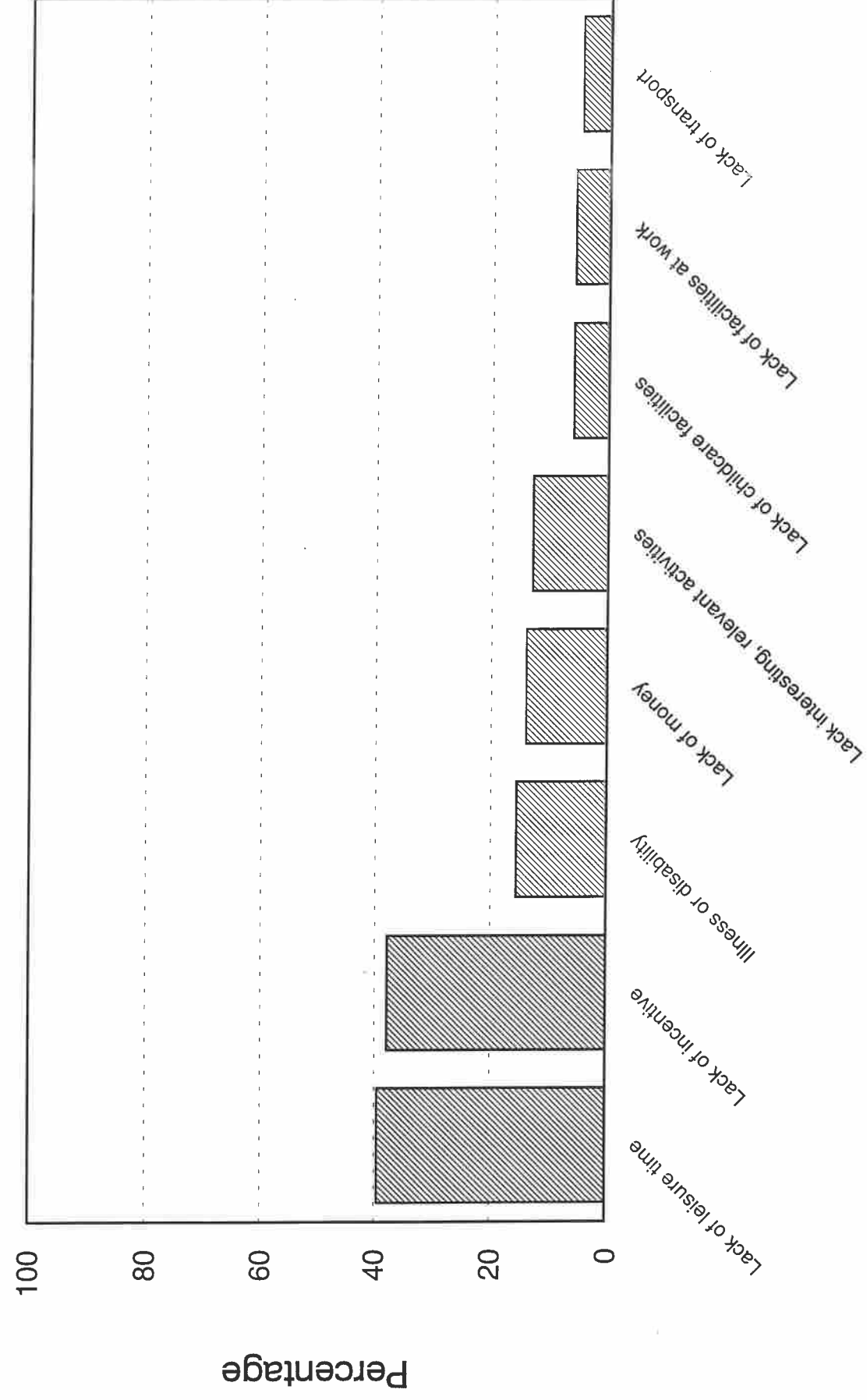


Figure 6.2 Reasons for not exercising for people of 45 years and over

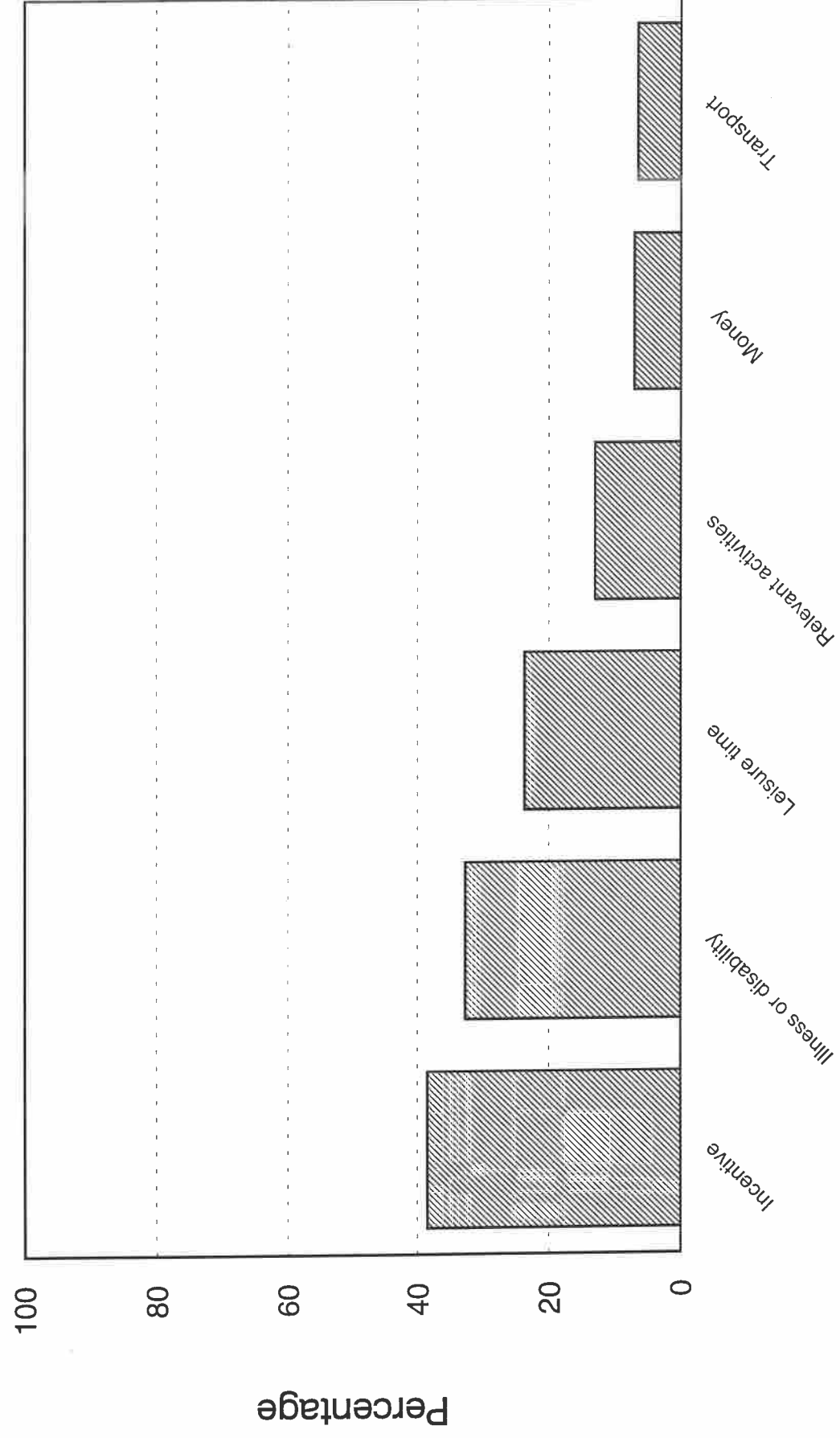


Figure 6.3 Reasons for not exercising for people less than 45 years

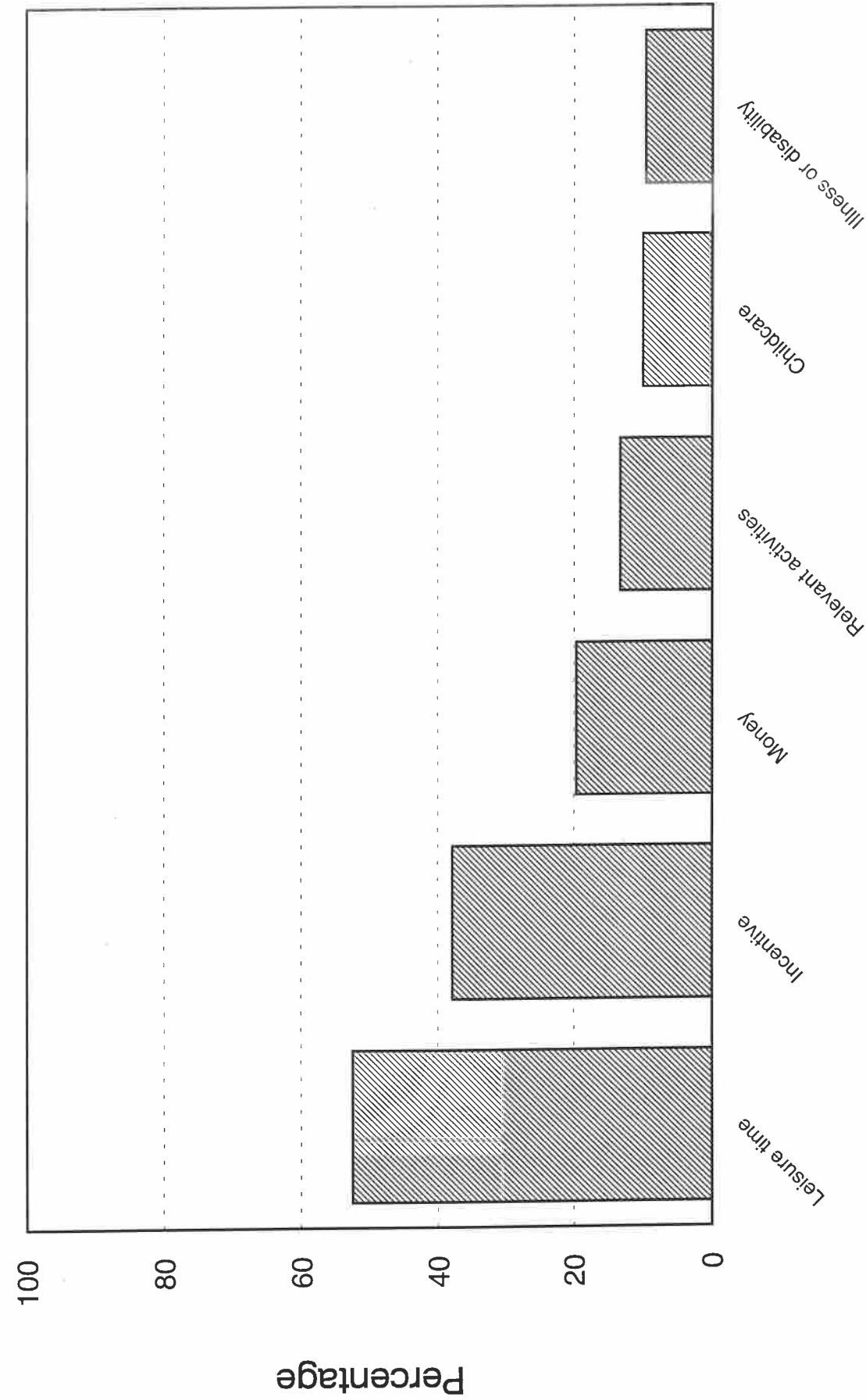
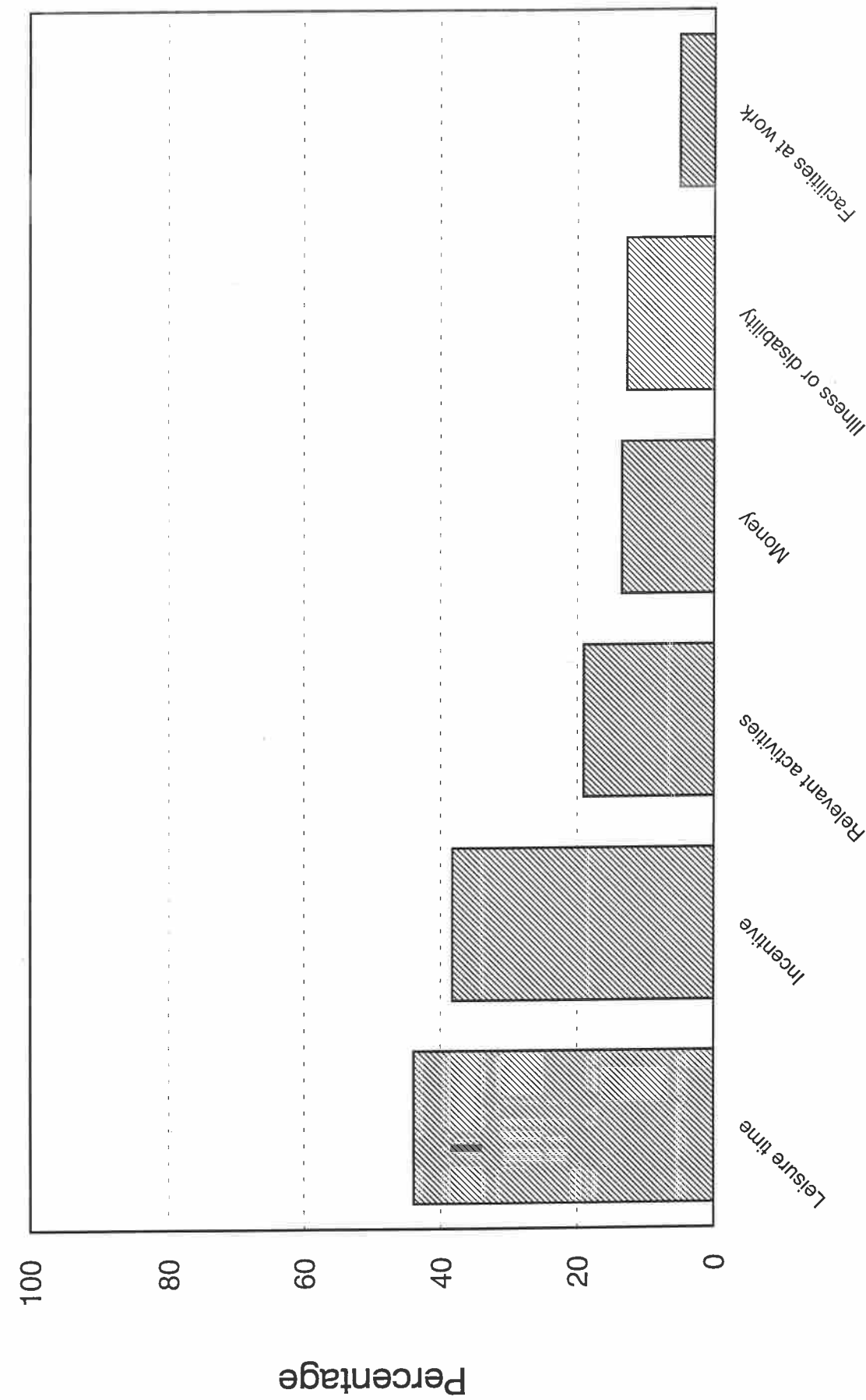


Figure 6.4 Reasons for not exercising for men



7. WEIGHT AND DIET

Each person in the survey was asked to record their weight and height; they were given the choice to record these in either imperial or metric scales. From these one is able to calculate a score known as the body mass index (BMI) from the following ratio,

$$\text{BMI} = \frac{\text{Weight}}{\text{Height}^2}$$

where weight is measured in kilograms and height in metres. From this score one is able to ascertain whether a person is normal, overweight or obese from the categorisations given in Table 7.1.

Table 7.1 - Categorisation of Body Mass Index

Category	Males	Females
Underweight	<20	<20
Normal	20 to 25	20 to 23.8
Overweight	25 to 30	23.8 to 28.6
Obese	>30	>28.6

Table 7.2 and Figure 7.1 give the weight categories broken down by age. Neary half the people had weights and heights that classified them as normal/underweight, and half were categorised as overweight/obese. There was a significant trend of being overweight by age (Kruskal-Wallis $\chi^2 = 26.4$, $df = 5$, $p = 0.001$), with the number of people whose BMI was classified within a normal range of values falling from 54% (95% CI = 41% to 67%) for the under 25's to 32% (95% CI = 24% to 40%) for the over 65's, although the number of people with a BMI that makes them underweight increases in number from the age category 55 to 64.

Figure 7.1 Percentage overweight or obese by age

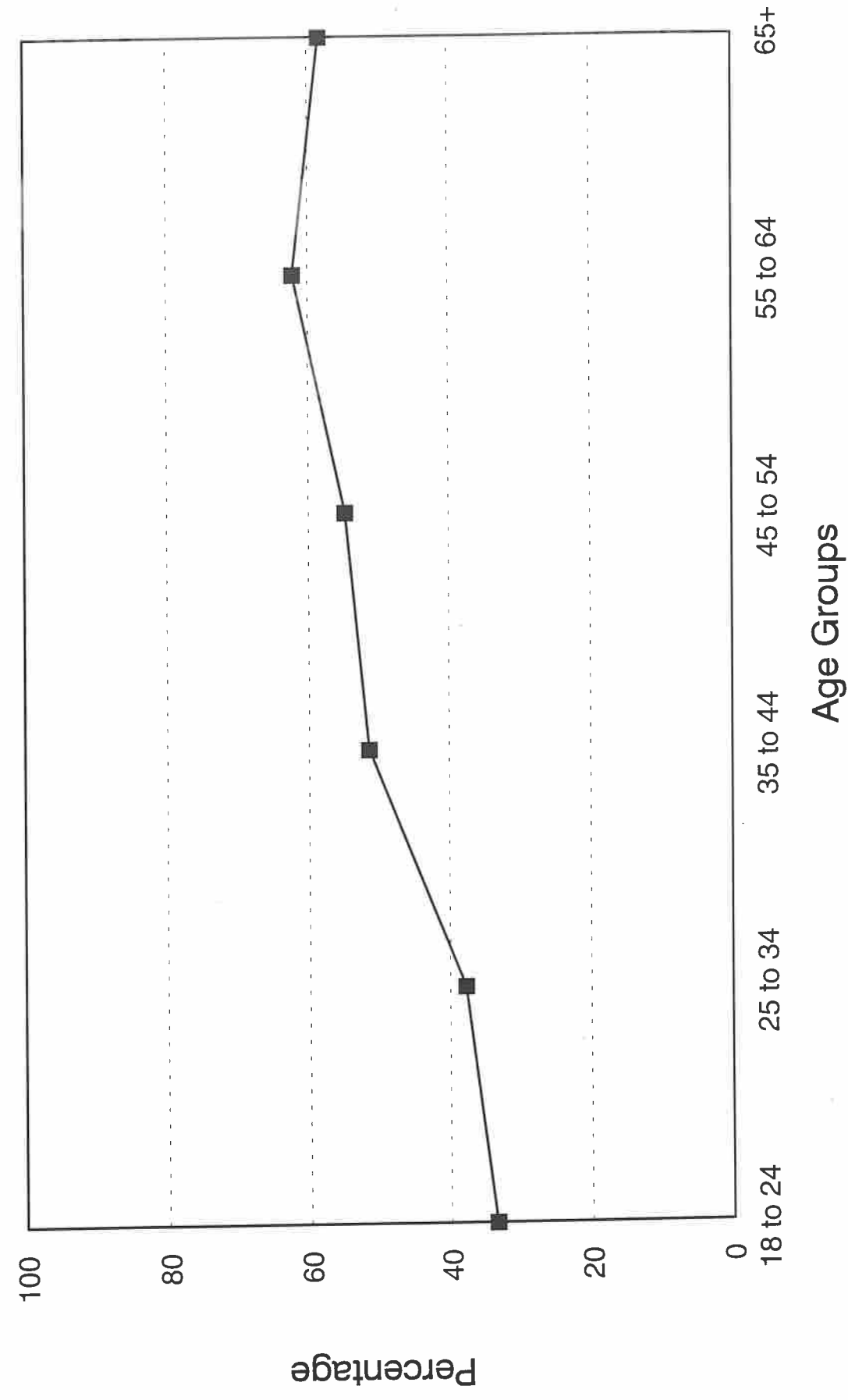


Table 7.2 - Body Mass Index broken down by Age

Age Categories	Body Mass Index				Row Total
	Underweight	Normal	Overweight	Obese	
18 to 24	8 (12.7%)	34 (54.0%)	18 (28.6%)	3 (4.8%)	63 (100.0%)
25 to 34	13 (11.4%)	58 (50.9%)	32 (28.1%)	11 (9.6%)	114 (100.0%)
35 to 44	7 (6.9%)	42 (41.6%)	39 (38.6%)	13 (12.9%)	101 (100.0%)
45 to 54	5 (6.0%)	33 (39.3%)	32 (38.1%)	14 (16.7%)	84 (100.0%)
55 to 64	1 (1.1%)	33 (36.7%)	39 (43.3%)	17 (18.9%)	90 (100.0%)
65+	12 (9.6%)	40 (32.0%)	52 (41.6%)	21 (16.8%)	125 (100.0%)
Column Total	46 (8.0%)	240 (41.6%)	212 (36.7%)	79 (13.7%)	577 (100.0%)

These trends are consistent amongst both men and women (Table 7.3 and 7.4 respectively, and Figure 2, with $\chi^2 = 10.94$, $df = 5$, $p = 0.053$ and $\chi^2 = 21.66$, $df = 5$, $p = 0.001$), although they are not so marked amongst males, for whom the significance at $p = 0.053$ does not reach conventional significance. From Table 7.5 it is evident that there is no difference in proportion of people overweight amongst the sexes ($\chi^2 = 0.89$, $df = 1$, $p = 0.35$).

Table 7.3 - Body Mass Index broken down by Age for Men

Age Categories	Body Mass Index				Row Total
	Underweight	Normal	Overweight	Obese	
18 to 24	1 (4.3%)	14 (60.9%)	8 (34.8%)	0 (0.0%)	23 (100.0%)
25 to 34	4 (7.7%)	25 (48.1%)	19 (36.5%)	4 (7.7%)	52 (100.0%)
35 to 44	0 (0.0%)	15 (34.1%)	23 (52.3%)	6 (13.6%)	44 (100.0%)
45 to 54	0 (0.0%)	17 (51.5%)	12 (36.4%)	4 (12.1%)	33 (100.0%)
55 to 64	0 (0.0%)	17 (37.8%)	23 (51.1%)	5 (11.1%)	45 (100.0%)
65+	2 (4.2%)	22 (45.8%)	16 (33.3%)	8 (16.7%)	48 (100.0%)
Column Total	46 (8.0%)	110 (44.9%)	101 (41.2%)	27 (11.0%)	245 (100.0%)

THIS IS
INCORRECT
SHOULD BE
7 (2.9%)

Table 7.4 - Body Mass Index broken down by Age for Women

Age Categories	Body Mass Index				Row Total
	Underweight	Normal	Overweight	Obese	
18 to 24	7 (17.5%)	27 (50.0%)	10 (25.0%)	3 (7.5%)	40 (100.0%)
25 to 34	9 (14.5%)	33 (53.2%)	13 (21.0%)	7 (11.3%)	62 (100.0%)
35 to 44	7 (12.3%)	27 (47.4%)	16 (28.1%)	7 (12.3%)	57 (100.0%)
45 to 54	5 (9.8%)	16 (31.4%)	20 (39.2%)	10 (19.6%)	51 (100.0%)
55 to 64	1 (2.2%)	16 (23.4%)	16 (35.6%)	12 (26.7%)	45 (100.0%)
65+	10 (13.0%)	18 (23.4%)	36 (46.8%)	13 (16.9%)	77 (100.0%)
Column Total	39 (11.7%)	130 (39.2%)	111 (33.4%)	52 (15.7%)	332 (100.0%)

SHOULD BE 35.6%

Table 7.5 - Body Mass Index broken down by Sex

	Body Mass Index				Row Total
	Underweight	Normal	Overweight	Obese	
What sex are you					
Male	8 (3.2%)	110 (44.5%)	102 (41.3%)	27 (10.9%)	247 (100.0%)
Female	39 (11.7%)	130 (39.2%)	111 (33.4%)	52 (15.7%)	332 (100.0%)
Column Total	47 (8.1%)	240 (41.5%)	213 (36.8%)	79 (13.6%)	579 (100.0%)

Diet

The people in the survey were asked six questions concerning food; these covered the food they ate; whether their diet had changed and, if so, if for any particular reason; and finally any factors which may assist in changing their eating.

Types of Food Eaten

For each category of food given, the majority of people in the survey thought that the amount consumed was about right (Table 7.6)

Table 7.6 - Types of Food Eaten and Quantity

	Frequency	Percent
Fish, Poultry		
Too much	90	1.5%
Too little	88	14.5%
About right	495	81.7%
Not sure	14	2.3%
Total	606	100.0%
Meat		
Too much	39	6.6%
Too little	48	8.1%
About right	486	81.7%
Not sure	22	3.7%
Total	595	100.0%

	Frequency	Percent
Processed Meat		
Too much	49	8.6%
Too little	88	15.4%
About right	374	65.4%
Not sure	61	10.7%
Total	572	100.0%
Fatty foods		
Too much	159	26.2%
Too little	64	10.6%
About right	359	59.2%
Not sure	24	4.0%
Total	606	100.0%
Low fat spreads		
Too much	7	1.2%
Too little	143	24.7%
About right	410	70.9%
Not sure	18	3.1%
Total	578	100.0%
Full cream milk		
Too much	46	8.8%
Too little	113	21.6%
About right	322	61.7%
Not sure	41	7.9%
Total	522	100.0%
Semi-skimmed milk		
Too much	10	1.8%
Too little	133	24.1%
About right	370	67.2%
Not sure	38	6.9%
Total	551	100.0%
Skimmed milk		
Too much	7	1.4%
Too little	175	35.5%
About right	249	50.5%
Not sure	62	12.6%
Total	493	100.0%

	Frequency	Percent
Sugary foods		
Too much	219	36.2%
Too little	50	8.3%
About right	314	51.9%
Not sure	22	3.6%
Total	605	100.0%
Salt		
Too much	100	16.6%
Too little	49	8.1%
About right	436	72.2%
Not sure	19	3.1%
Total	604	100.0%
High fibre foods		
Too much	18	2.9%
Too little	128	20.7%
About right	460	74.4%
Not sure	12	1.9%
Total	618	100.0%
Wholemeal breads		
Too much	14	2.3%
Too little	209	34.5%
About right	370	61.2%
Not sure	12	2.0%
Total	605	100.0%

Nevertheless, for certain types of food a sizeable minority of people thought that the quantity consumed was not correct. Thirty-six per cent believed they were eating too much sugary foods, as well as 17% who thought they were consuming excessive amounts of salt, and the 26% who had too much fatty foods. Additionally a number of people thought that they were eating too little low fat spreads and semi and fully skimmed milk (25%, 24% and 36% respectively), as well as insufficient high fibre foods and wholemeal bread (21% and 35% respectively). Figures 7.3 and 7.4 give the top six foods that people thought they were eating too little and too much of respectively.

Changes in Diet

Sixty-six per cent of the people in the survey recorded that they had changed their diet compared to three years previously (Table 7.7). Table 7.8 gives a breakdown of the foods that people who have altered their diet have changed. They claim to have cut back on their consumption of red and processed meats as well as fatty and sugary foods, while increasing the quantity of white meats and high fibre foods eaten. The main reason given for this change in diet (Table 7.9) is for health reasons (56%), ie. to feel fitter or to attempt to eat healthier foods, with an additional 18% changing on advice from their doctor.

Table 7.7 - Change in Diet

	Frequency	Percent
Are you eating a different diet from this time 3 years ago		
Definitely different	119	20.2%
Small change only	249	42.3%
No change	211	35.9%
Not sure	9	1.5%
Total	588	100.0%

Table 7.8 - Types of Food Changed

	Frequency	Percent
Fish, Poultry, Offal		
More	163	49.2%
Less	46	13.9%
The same	118	35.6%
Not sure	4	1.2%
Total	331	100.0%
Meat		
More	24	7.5%
Less	176	55.0%
The same	120	37.5%
Not sure	0	0.0%
Total	320	100.0%

	Frequency	Percent
Processed Meat		
More	23	7.3%
Less	198	63.3%
The same	89	28.4%
Not sure	3	1.0%
Total	313	100.0%
Fatty foods		
More	27	8.0%
Less	235	69.7%
The same	75	22.3%
Not sure	0	0.0%
Total	337	100.0%
Low fat spreads		
More	142	44.8%
Less	45	14.2%
The same	123	38.8%
Not sure	7	2.2%
Total	317	100.0%
Full cream milk		
More	11	3.7%
Less	203	68.6%
The same	80	27.0%
Not sure	2	0.7%
Total	296	100.0%
Semi-skimmed milk		
More	107	37.3%
Less	54	18.8%
The same	116	40.4%
Not sure	10	3.5%
Total	287	100.0%
Skimmed milk		
More	75	28.0%
Less	50	18.7%
The same	121	45.1%
Not sure	22	8.2%
Total	268	100.0%

	Frequency	Percent
Sugary foods		
More	29	9.1%
Less	184	57.5%
The same	102	31.9%
Not sure	5	1.6%
Total	320	100.0%
Salt		
More	13	4.0%
Less	138	42.6%
The same	167	51.5%
Not sure	6	1.9%
Total	324	100.0%
High fibre foods		
More	175	52.6%
Less	23	6.9%
The same	134	40.2%
Not sure	1	0.3%
Total	333	100.0%
Wholemeal breads		
More	156	48.4%
Less	40	12.4%
The same	118	36.6%
Not sure	8	2.5%
Total	322	100.0%

Table 7.9 - Reasons for Changing Diet

	Frequency	Percent
What was the main reason for changing your diet		
Improve your appearance	33	10.6%
Medical reasons	56	18.1%
Health reasons	172	55.5%
Other reasons	49	15.8%
Total	310	100.0%

People who changed their diet were asked whether there was a link between the food they ate and six different diseases (Table 7.10 and Figure 7.5). The people tended to agree overwhelmingly that diet was linked to diabetes, heart disease, irritable bowel syndrome and high blood pressure (70%, 95%, 85% and 84% respectively), but were not sure about a link between diet and cancer or arthritis (47% and 53%).

Table 7.10 - Connections between Food and Disease

	Frequency	Percent
Diabetes		
Yes	228	69.7%
No	99	30.3%
Total	327	100.0%
Cancer		
Yes	152	47.1%
No	171	52.9%
Total	323	100.0%
Arthritis		
Yes	148	46.8%
No	168	53.2%
Total	316	100.0%
Coronary heart disease		
Yes	326	94.8%
No	18	5.2%
Total	344	100.0%
Irritable bowel syndrome		
Yes	279	84.5%
No	51	15.5%
Total	330	100.0%
High blood pressure		
Yes	287	83.7%
No	56	16.3%
Total	343	100.0%

Factors Assisting Diet Change

Everyone in the survey was asked what they would find most helpful if they required assistance in changing their diet. Most people stated that advice from their doctor (61%) would be most beneficial, with a majority (57%) also recording that support from their close family would be of help, while 48% said their own willpower would be of help. A number of people would seek help from an organised group such as Weight Watchers (18%), while a further minority of people thought better labelling of the nutrition in food products (18%) and healthy products at more affordable prices (22%) would assist them in having a better diet.

Table 7.11 - What would assist in Changing Diet

	Frequency	Percent
Encouragement and support from close family	357	56.5%
Yes	275	43.5%
No	632	100.0%
Total		
Encouragement and support from friends at work	49	7.8%
Yes	583	92.2%
No	632	100.0%
Total		
Encouragement and support from close friends	77	12.2%
Yes	555	87.8%
No	632	100.0%
Total		
An organised group	114	18.0%
Yes	518	82.0%
No	632	100.0%
Total		
Advice from a doctor	386	61.1%
Yes	246	38.9%
No	632	100.0%
Total		

	Frequency	Percent
Advice from a nurse		
Yes	25	4.0%
No	606	96.0%
Total	631	100.0%
A booklet offering advice and practical tips		
Yes	95	15.1%
No	536	84.9%
Total	631	100.0%
Better food labelling with details of nutrition		
Yes	113	17.9%
No	518	82.1%
Total	631	100.0%
Wider availability of 'healthy' foods at an affordable price		
Yes	140	22.2%
No	491	77.8%
Total	631	100.0%
Your own willpower		
Yes	302	47.8%
No	330	52.2%
Total	632	100.0%

Figure 7.2 Percentage overweight or obese by age for men and women

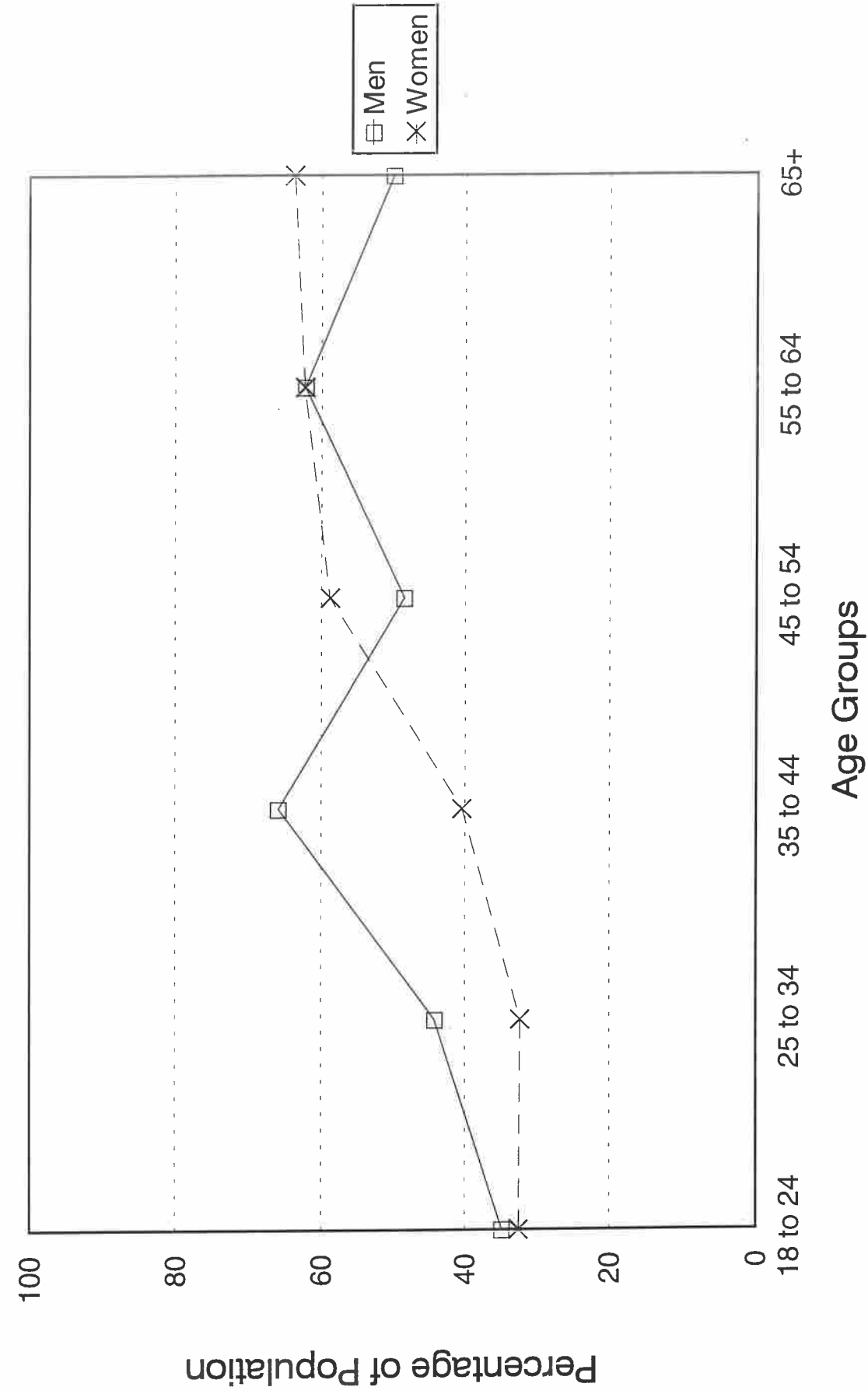


Figure 7.3 The types of food people classified as eating too little

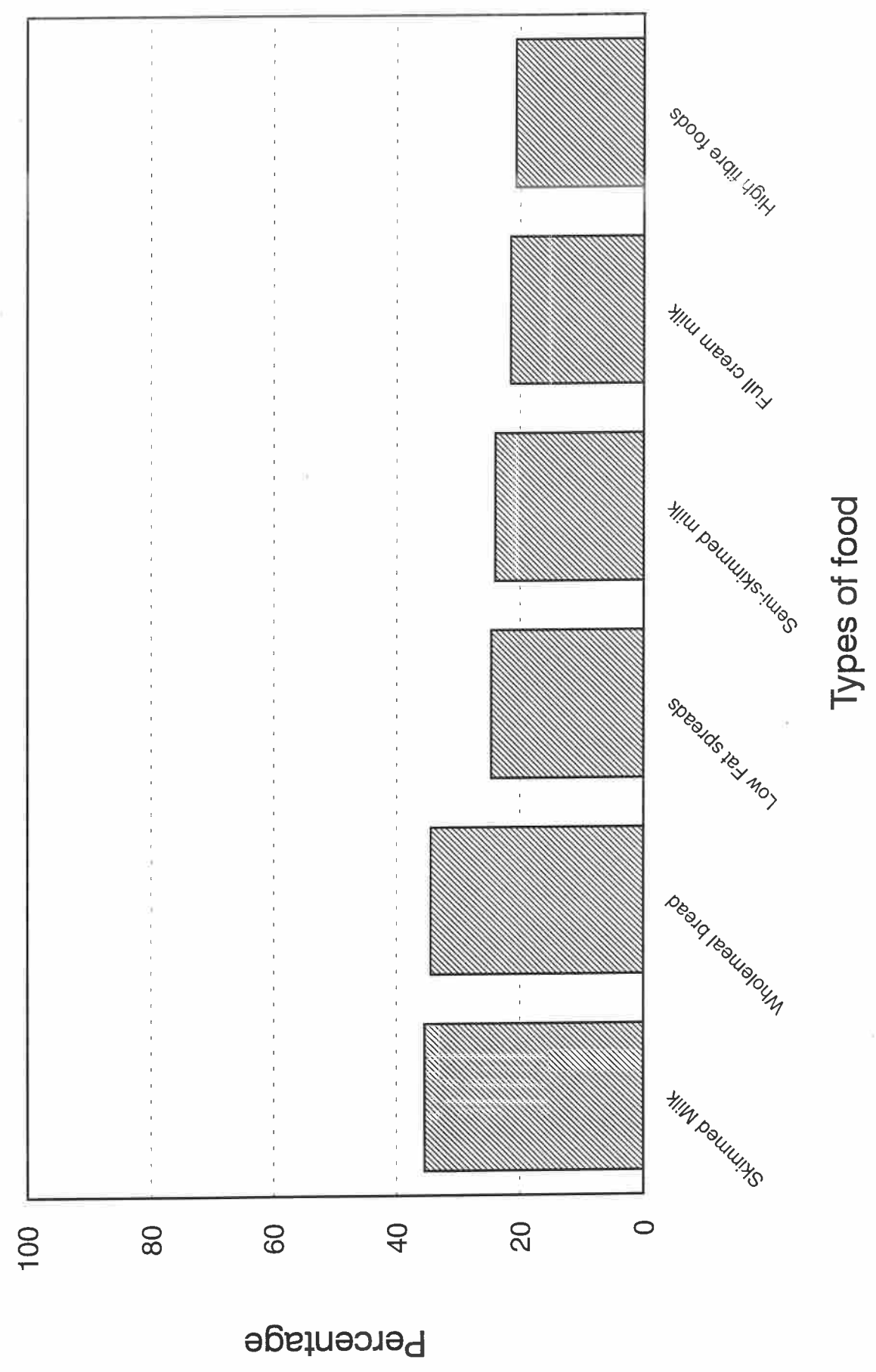


Figure 7.4 The types of food people classified as eating too much of

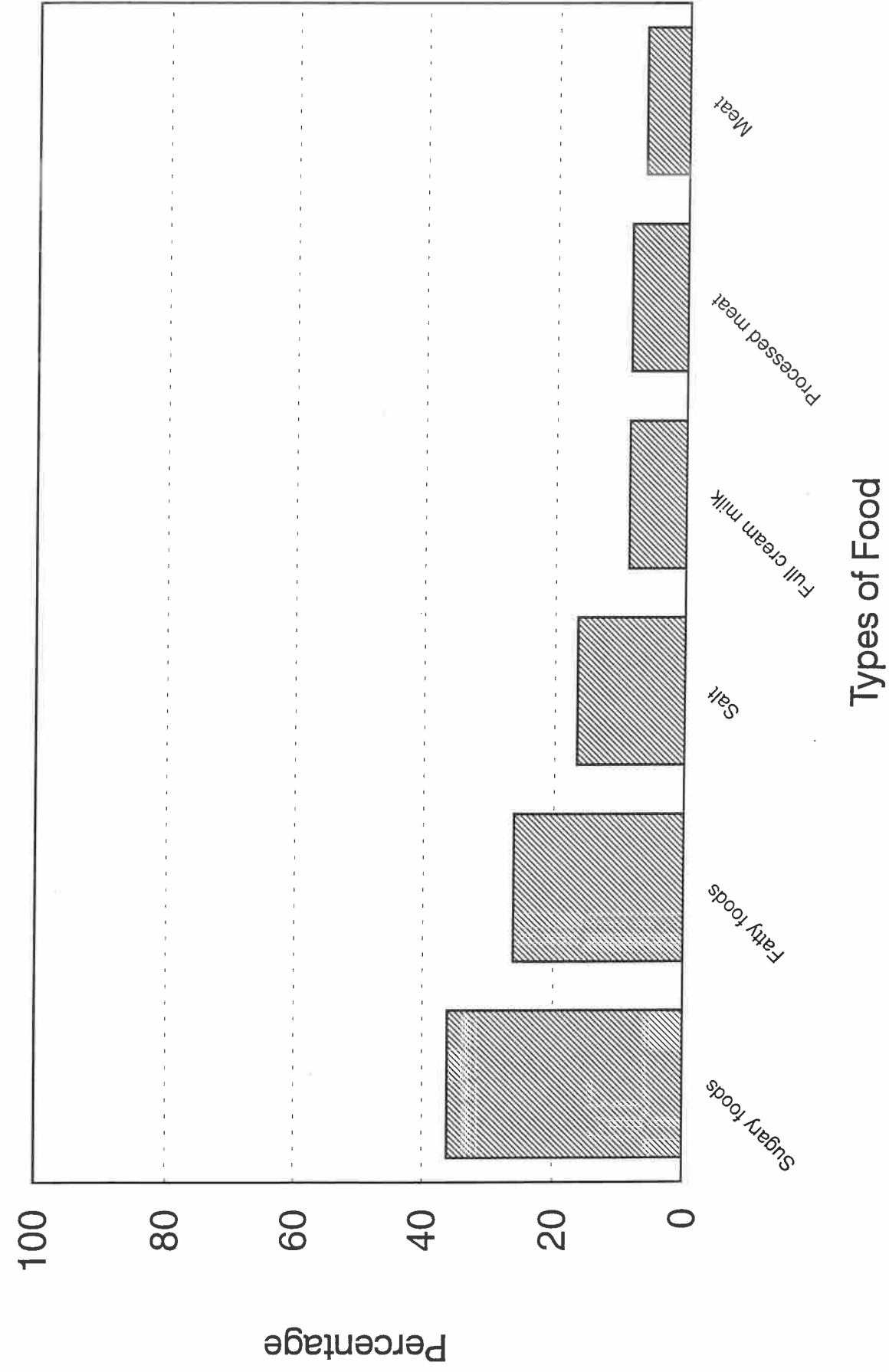
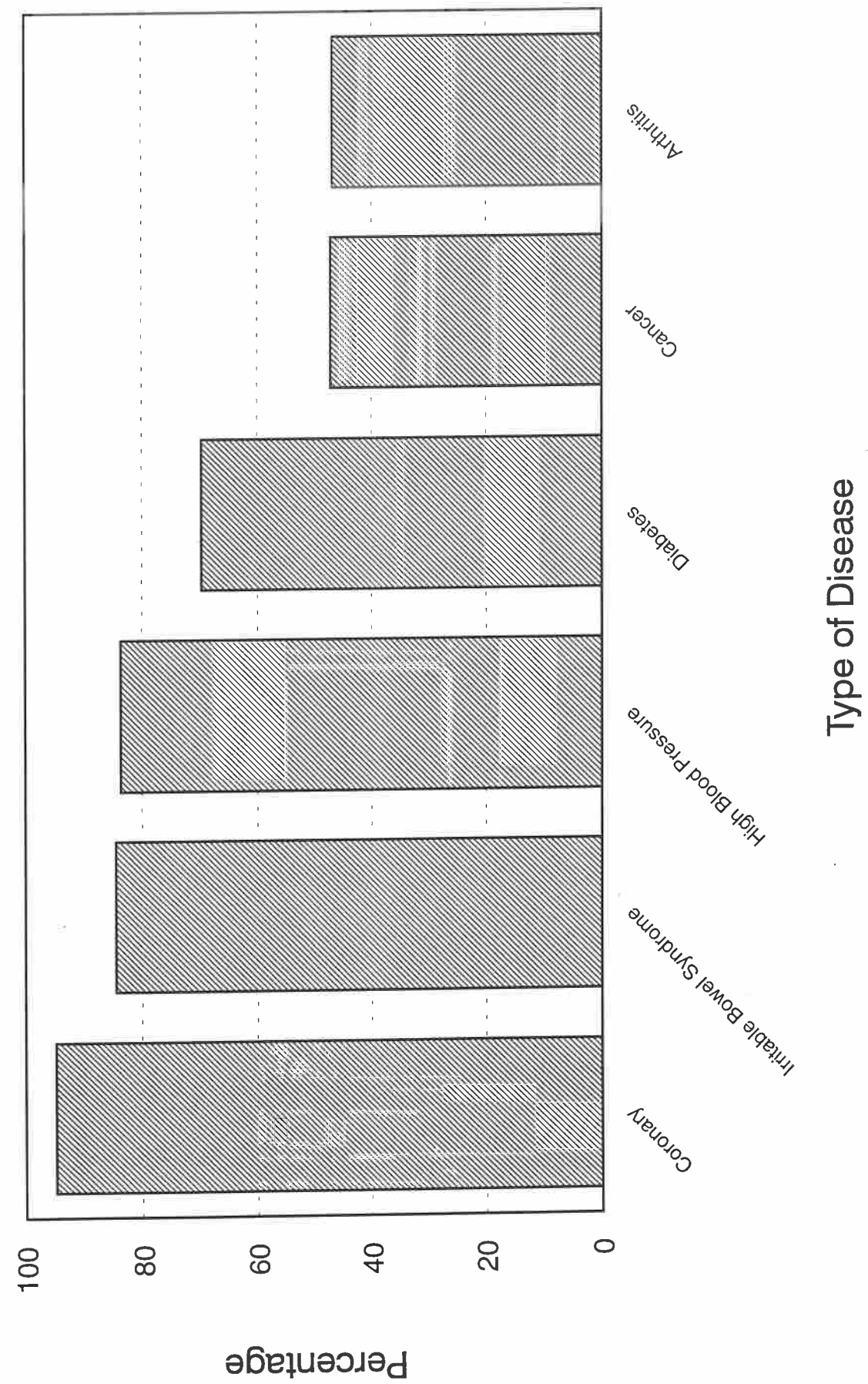


Figure 7.5 Percentage of people believing there to be a connection between food and different diseases



8. USE OF HEALTH SERVICES

The people in the survey were asked a series of questions relating to health services provided in Guernsey. Each person in the survey was questioned on the services which they had used and whether they had been called in by their doctor for a routine health check. Women were asked whether they had had a cervical smear test in the past five years and whether, if called, they would be prepared to attend a breast screening check. Finally each person was asked their opinion of a number of health services.

Services Attended

Thirty-one per cent of the people in the survey had been asked to attend a health check by their G.P. (Table 8.1). However, the figure rose with age, with over half the over 65's being invited to attend by their G.P. (Pearson $\chi^2 = 75.89$, df = 10, p <0.001).

Table 8.2 gives a list of health services people may have used in the previous five years. The majority of people have had an eye and dental check (74% and 84% respectively), and a sizeable minority have had a screening by the Chest and Heart Unit (40%). The health service least used by people in the survey is a well person check (8%). The proportion of people attending an eyesight check is also broken down by age (Table 8.3). There is a significant increase, with increased age, of people having their eyes checked, rising from 60% in the under 25's to 87% in the over 65's (Pearson $\chi^2 = 55.22$, df = 10, p <0.001).

Ninety-one per cent of the survey sample have had their blood pressure taken in the last five years (Table 8.4) and, although there is a slight increase in the proportion having their pressure taken by age, this increase is not significant ($\chi^2 = 14.24$, df = 10, p = 0.162), with 80% of people under 25 having had their blood pressure checked. Of those who had their blood pressure checked 20% were told that they had elevated or high blood pressure (Table 8.5), with the figure increasing markedly with age, from 2% for people under 25 to 33% for people over 65 ($\chi^2 = 41.31$, df = 10, p <0.001).

Health Services for Women

The overwhelming majority of women have both had a cervical smear (Table 8.6) and would be prepared to attend for a breast screening check (Table 8.7). There are differences by age ($\chi^2 = 112.21$, df = 10, p <0.001 and $\chi^2 = 24.68$, df = 5, p <0.001) but the only real difference is for women over 65 who have had a smear, at just 27%, compared to an overall proportion of women having smears at 70%.

Opinion on Health Services

Table 8.8 gives a list of the opinions the people in the survey had regarding health services they have used in the past year. With the exception of the Princess Elizabeth Hospital, the majority of people have not used the health services list but, if they have, they have thought very highly of them.

Table 8.1 - Health Check by Age

Age Categories	Has G.P. invited you to attend the surgery for a check-up			Row Total
	Yes	No	Not sure	
18 to 24	15 (22.4%)	48 (71.6%)	4 (6.0%)	67 (100.0%)
25 to 34	16 (13.3%)	100 (83.3%)	4 (3.3%)	120 (100.0%)
35 to 44	19 (17.6%)	85 (78.7%)	4 (3.7%)	108 (100.0%)
45 to 54	26 (28.0%)	63 (67.7%)	4 (4.3%)	93 (100.0%)
55 to 64	39 (41.9%)	52 (55.9%)	2 (2.2%)	93 (100.0%)
65+	73 (55.3%)	52 (39.4%)	7 (5.3%)	132 (100.0%)
Column Total	188 (30.7%)	400 (65.3%)	25 (4.1%)	613 (100.0%)

Table 8.2 - Health Services Used in Last Five Years

	Frequency	Percent
Well Woman check		
Yes	127	30.1%
No	284	67.3%
Not sure	11	2.6%
Total	422	100.0%
Well Person check		
Yes	31	7.6%
No	360	87.8%
Not sure	19	4.6%
Total	410	100.0%
Private health screening/check		
Yes	73	16.7%
No	357	81.5%
Not sure	8	1.8%
Total	438	100.0%
Chest and heart screening		
Yes	204	41.6%
No	280	57.1%
Not sure	6	1.2%
Total	490	100.0%
Eyesight check		
Yes	410	73.9%
No	141	25.4%
Not sure	4	0.7%
Total	555	100.0%
Dental check		
Yes	434	81.4%
No	96	18.0%
Not sure	3	0.6%
Total	533	100.0%

Table 8.3 - Eyesight Check Attended by Age

Age Categories	Have you attended an eyesight check?			Row Total
	Yes	No	Not sure	
18 to 24	41 (60.3%)	25 (36.8%)	2 (2.9%)	68 (100.0%)
25 to 34	72 (64.9%)	39 (35.1%)	0 (0.0%)	111 (100.0%)
35 to 44	50 (55.6%)	39 (43.3%)	1 (1.1%)	90 (100.0%)
45 to 54	76 (86.4%)	12 (13.6%)	0 (0.0%)	88 (100.0%)
55 to 64	74 (86.0%)	12 (14.0%)	0 (0.0%)	86 (100.0%)
65+	96 (86.5%)	14 (12.6%)	1 (0.9%)	111 (100.0%)
Column Total	409 (73.8%)	141 (25.5%)	4 (0.7%)	554 (100.0%)

Table 8.4 - Blood Pressure Taken by Age

Age Categories	Have you had blood pressure measured in past 5 years			Row Total
	Yes	No	Not sure	
18 to 24	57 (80.3%)	9 (12.7%)	5 (7.0%)	71 (100.0%)
25 to 34	108 (89.3%)	9 (7.4%)	4 (3.3%)	121 (100.0%)
35 to 44	99 (90.8%)	8 (7.3%)	2 (1.8%)	109 (100.0%)
45 to 54	87 (93.5%)	4 (4.3%)	2 (2.2%)	93 (100.0%)
55 to 64	86 (91.5%)	6 (6.4%)	2 (2.1%)	94 (100.0%)
65+	129 (94.2%)	7 (5.1%)	1 (0.7%)	137 (100.0%)
Column Total	566 (90.6%)	43 (6.9%)	16 (2.6%)	625 (100.0%)

Table 8.5 - Told of High Blood Pressure Taken by Age

Age Categories	Have you been told you have high or elevated blood pressure			Row Total
	Yes	No	Not sure	
18 to 24	1 (1.8%)	51 (92.7%)	3 (5.5%)	55 (100.0%)
25 to 34	12 (11.1%)	91 (84.3%)	5 (4.6%)	108 (100.0%)
35 to 44	13 (13.3%)	84 (85.7%)	1 (1.0%)	98 (100.0%)
45 to 54	20 (23.3%)	65 (75.6%)	1 (1.2%)	86 (100.0%)
55 to 64	21 (25.0%)	59 (70.2%)	4 (4.8%)	84 (100.0%)
65+	41 (33.3%)	76 (61.8%)	6 (4.9%)	123 (100.0%)
Column Total	108 (19.5%)	426 (76.9%)	20 (3.6%)	554 (100.0%)

Table 8.6 - Smear Test by Age for Women

Age Categories	Women Only : Have you had a Cervical Smear			Row Total
	Yes	No	Not sure	
18 to 24	33 (76.7%)	10 (23.3%)	0 (0.0%)	43 (100.0%)
25 to 34	60 (92.3%)	3 (34.6)	2 (3.1%)	65 (100.0%)
35 to 44	54 (91.5%)	5 (8.5%)	0 (0.0%)	59 (100.0%)
45 to 54	43 (78.2%)	10 (18.2%)	2 (3.6%)	55 (100.0%)
55 to 64	31 (66.0%)	14 (29.8%)	2 (4.3%)	47 (100.0%)
65+	21 (26.6%)	57 (72.2%)	1 (1.3%)	79 (100.0%)
Column Total	242 (69.5%)	99 (28.4%)	7 (2.0%)	348 (100.0%)

Table 8.7 - Breast Screen by Age for Women

Age Categories	If invited, would or will you attend breast screening check		Row Total
	Yes	No	
18 to 24	40 (93.0%)	3 (7.0%)	43 (100.0%)
25 to 34	62 (95.4%)	3 (4.6%)	65 (100.0%)
35 to 44	59 (100.0%)	0 (0.0%)	59 (100.0%)
45 to 54	52 (92.9%)	4 (7.1%)	56 (100.0%)
55 to 64	44 (93.6%)	3 (6.4%)	47 (100.0%)
65+	61 (78.2%)	17 (21.8%)	78 (100.0%)
Column Total	188 (91.4%)	30 (8.6%)	348 (100.0%)

Table 8.8 - Opinion of Health Services

	Frequency	Percent
Health Visitors		
Not used	404	81.3%
Very poor	3	0.6%
Poor	2	0.4%
Fairly good	18	3.6%
Good	39	7.8%
Excellent	31	6.2%
Total	497	100.0%
District Nurses		
Not used	416	85.2%
Very poor	0	0.0%
Poor	1	0.2%
Fairly good	6	1.2%
Good	29	5.9%
Excellent	36	7.4%
Total	488	100.0%
	410	
Home Helps/Carers		
Not used	446	93.5%
Very poor	0	0.0%
Poor	1	0.2%
Fairly good	7	1.5%
Good	7	1.5%
Excellent	16	3.4%
Total	477	100.0%
Duchess of Kent Home		
Not used	444	95.1%
Very poor	1	0.2%
Poor	0	0.0%
Fairly good	3	0.6%
Good	11	2.4%
Excellent	8	1.7%
Total	467	100.0%

	Frequency	Percent
King Edward VII Hospital		
Not used	432	92.1%
Very poor	1	0.2%
Poor	3	0.6%
Fairly good	10	2.1%
Good	14	3.0%
Excellent	9	1.9%
Total	469	100.0%
Castel Hospital		
Not used	425	91.0%
Very poor	0	0.0%
Poor	4	0.9%
Fairly good	5	1.1%
Good	20	4.4%
Excellent	13	2.8%
Total	467	100.0%
Princess Elizabeth Hospital		
Not used	185	35.4%
Very poor	5	1.0%
Poor	2	0.4%
Fairly good	46	8.8%
Good	130	24.9%
Excellent	154	29.5%
Total	522	100.0%

9. SLEEPING AND STRESS

Each person in the survey was questioned on three areas relating to stress and sleep. They were first asked how well they slept and what assistance they obtained to help them sleep. They were then questioned on two related topics; factors which cause them anxiety and worry, and what they find effective in remedying the anxiety.

Sleeping

Fifty-eight per cent of those surveyed stated that they usually slept well (Table 9.1), and 42% recorded that they either sometimes don't sleep well or seldom sleep well, of whom 7% categorised themselves in the latter. The majority of people required no assistance sleeping (Table 9.2), with the most common item used being milky drinks, which 41% of people occasionally or more often used.

Stress

The majority of people in the survey suffer from anxiety of some sort (Table 9.3, and Figures 9.1 and 9.2), with the main items being worries concerning family, health and relationships. Money worries also figure strongly as an item of concern, although the threat of unemployment is not a factor concerning the majority of people. To obtain relief from anxiety (Table 9.4, and Figures 9.3 and 9.4) most people favoured discussing the problem with someone else or socialising with friends. Spending more time at work is not something many in the survey rate as a remedy for stress, nor taking tablets.

Table 9.1 - Person's Sleeping

Which statement best describes sleeping habits	Response Rate	
	Number	Percentage
I usually sleep well	360	57.8%
Sometimes I sleep well, sometimes I don't	228	36.6%
I seldom sleep well	35	5.6%
Total	623	100.0%

Table 9.2 - Assistance in Sleeping

	Frequency	Number
Do you take drugs to help you sleep		
Never	475	86.2%
Occasionally	52	9.4%
Frequently	8	1.5%
Always	16	2.9%
Total	551	100.0%
Do you take alcohol to help you sleep		
Never	459	87.8%
Occasionally	56	10.7%
Frequently	6	1.1%
Always	2	0.4%
Total	523	100.0%
Do you take milky drinks to help you sleep		
Never	339	59.3%
Occasionally	174	30.4%
Frequently	24	4.2%
Always	35	6.1%
	572	100.0%

Table 9.3 - Factors that Cause Anxiety

	Frequency	Percent
Housing		
Never	392	70.6%
Occasionally	128	23.1%
Frequently	27	4.9%
Always	8	1.4%
Total	555	100.0%
Relationships between family members		
Never	184	31.9%
Occasionally	307	53.2%
Frequently	64	11.1%
Always	22	3.8%
Total	577	100.0%
Problems associated with living on an island		
Never	356	63.8%
Occasionally	158	28.3%
Frequently	30	5.4%
Always	14	2.5%
Total	558	100.0%
Money worries		
Never	193	33.6%
Occasionally	274	47.7%
Frequently	68	11.8%
Always	39	6.8%
Total	574	100.0%
Your family's health		
Never	122	21.3%
Occasionally	366	63.9%
Frequently	58	10.1%
Always	27	4.7%
Total	573	100.0%
Pressures at work		
Never	204	39.4%
Occasionally	202	39.0%
Frequently	84	16.2%
Always	28	5.4%
Total	518	100.0%

	Frequency	Percent
Worries about global issues		
Never	280	51.1%
Occasionally	218	39.8%
Frequently	44	8.0%
Always	6	1.1%
Total	548	100.0%
Threat of unemployment		
Never	351	66.6%
Occasionally	135	25.6%
Frequently	24	4.6%
Always	17	3.2%
Total	527	100.0%
Boredom at work		
Never	387	75.4%
Occasionally	97	18.9%
Frequently	22	4.3%
Always	7	1.4%
Total	513	100.0%
Transport difficulties		
Never	318	58.3%
Occasionally	181	33.2%
Frequently	27	5.0%
Always	19	3.5%
Total	545	100.0%

Table 9.4 - Factors that Reduce Anxiety

	Frequency	Percent
Attempting to forget problems		
Very effective	33	6.5%
Fairly effective	115	22.7%
Neither effective or ineffective	159	31.4%
Not at all effective	200	39.4%
Total	507	100.0%

	Frequency	Percent
Resting and relaxing		
Very effective	190	34.9%
Fairly effective	300	55.1%
Neither effective or ineffective	44	8.1%
Not at all effective	10	1.8%
Total	544	100.0%
Having a few drinks		
Very effective	35	7.2%
Fairly effective	150	30.7%
Neither effective or ineffective	141	28.9%
Not at all effective	162	33.2%
Total	488	100.0%
Discussing the problem with another		
Very effective	217	40.5%
Fairly effective	261	48.6%
Neither effective or ineffective	43	8.0%
Not at all effective	16	3.0%
Total	537	100.0%
Having a cigarette		
Very effective	39	8.4%
Fairly effective	69	14.8%
Neither effective or ineffective	74	15.8%
Not at all effective	285	61.0%
Total	467	100.0%
Socialising with friends		
Very effective	108	21.1%
Fairly effective	281	54.8%
Neither effective or ineffective	87	17.0%
Not at all effective	37	7.2%
Total	513	100.0%
Taking some exercise		
Very effective	128	25.0%
Fairly effective	233	45.6%
Neither effective or ineffective	108	21.1%
Not at all effective	42	8.2%
Total	511	100.0%

	Frequency	Percent
Spending more time working		
Very effective	48	9.5%
Fairly effective	134	26.4%
Neither effective or ineffective	146	28.8%
Not at all effective	179	35.3%
Total	507	100.0%
Eating more		
Very effective	11	2.2%
Fairly effective	46	9.1%
Neither effective or ineffective	140	27.8%
Not at all effective	307	60.9%
Total	504	100.0%
Taking tablets		
Very effective	11	2.2%
Fairly effective	40	8.0%
Neither effective or ineffective	75	15.0%
Not at all effective	373	74.7%
Total	499	100.0%

Figure 9.1 Factors that never cause anxiety

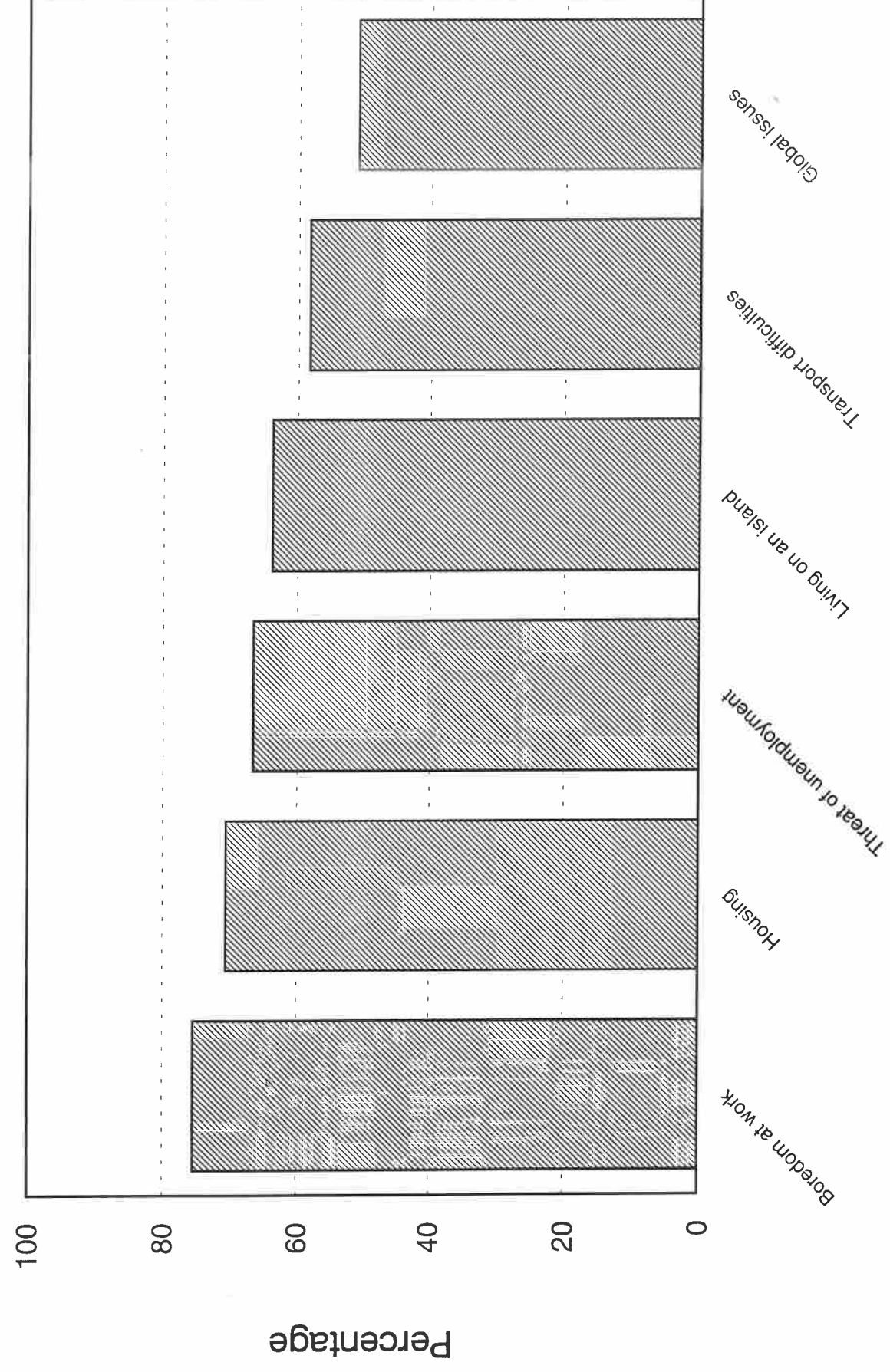


Figure 9.2 Factors that frequently cause anxiety

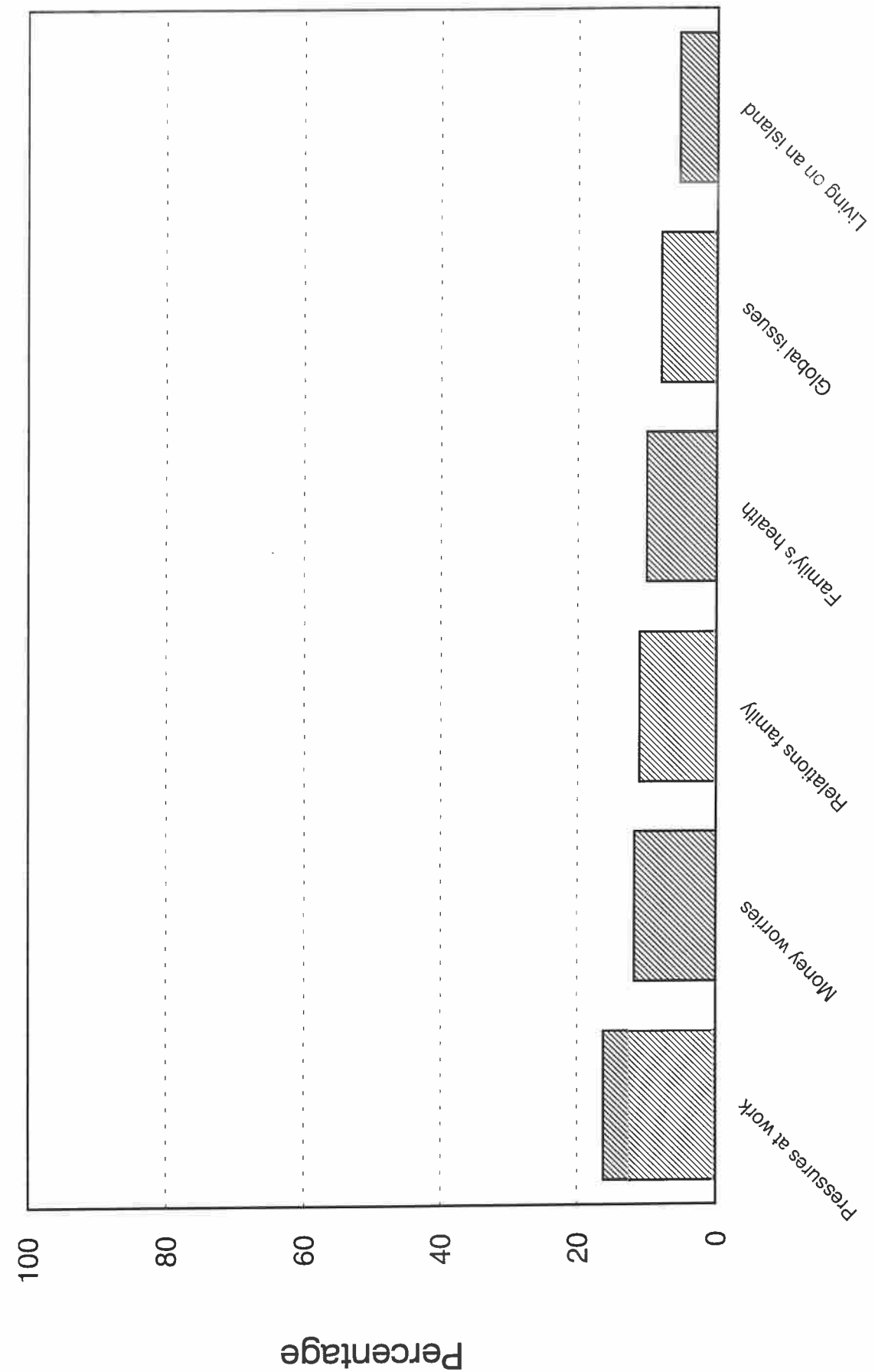


Figure 9.3 Factors that are not at all effective reducing anxiety

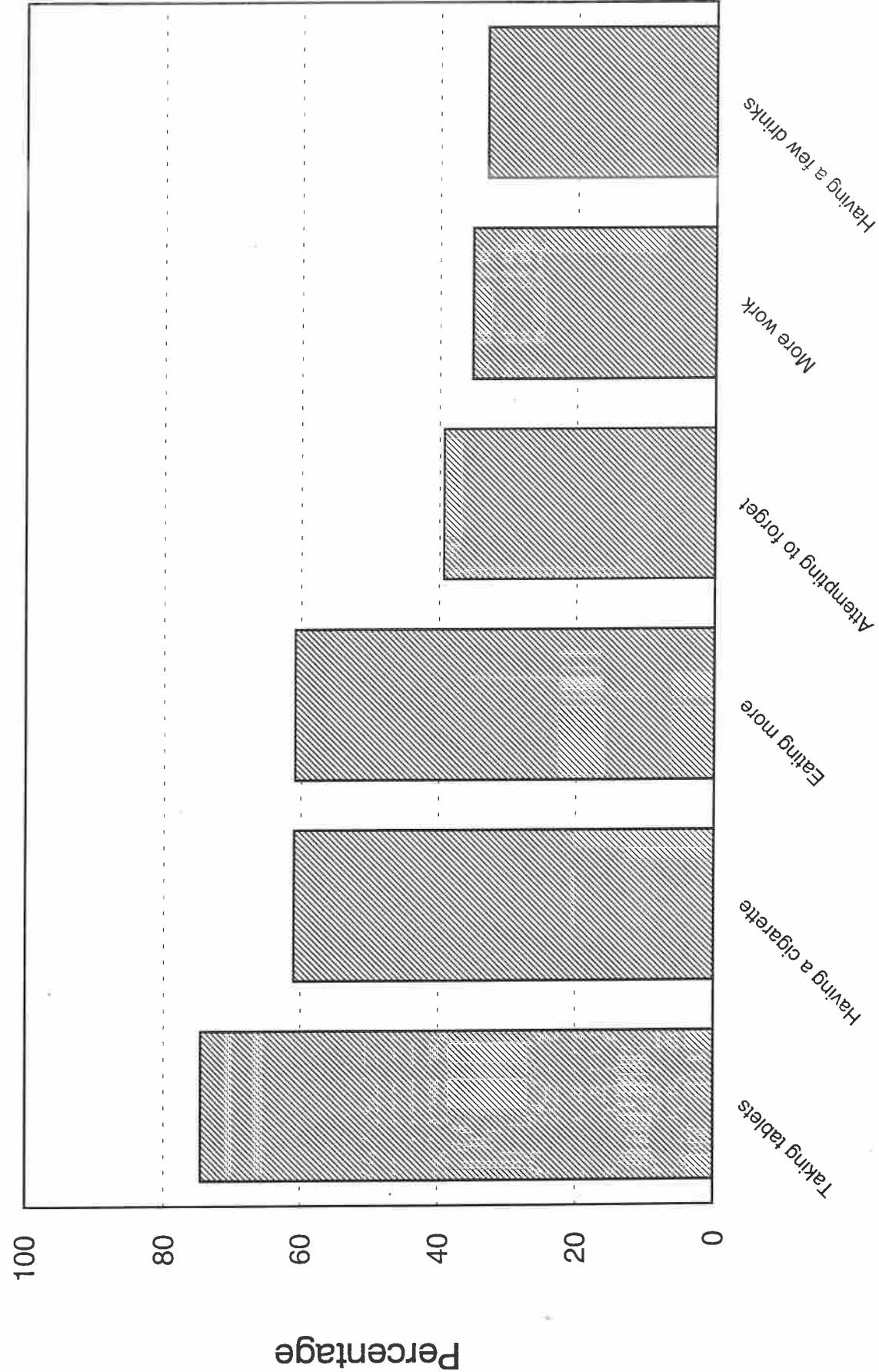
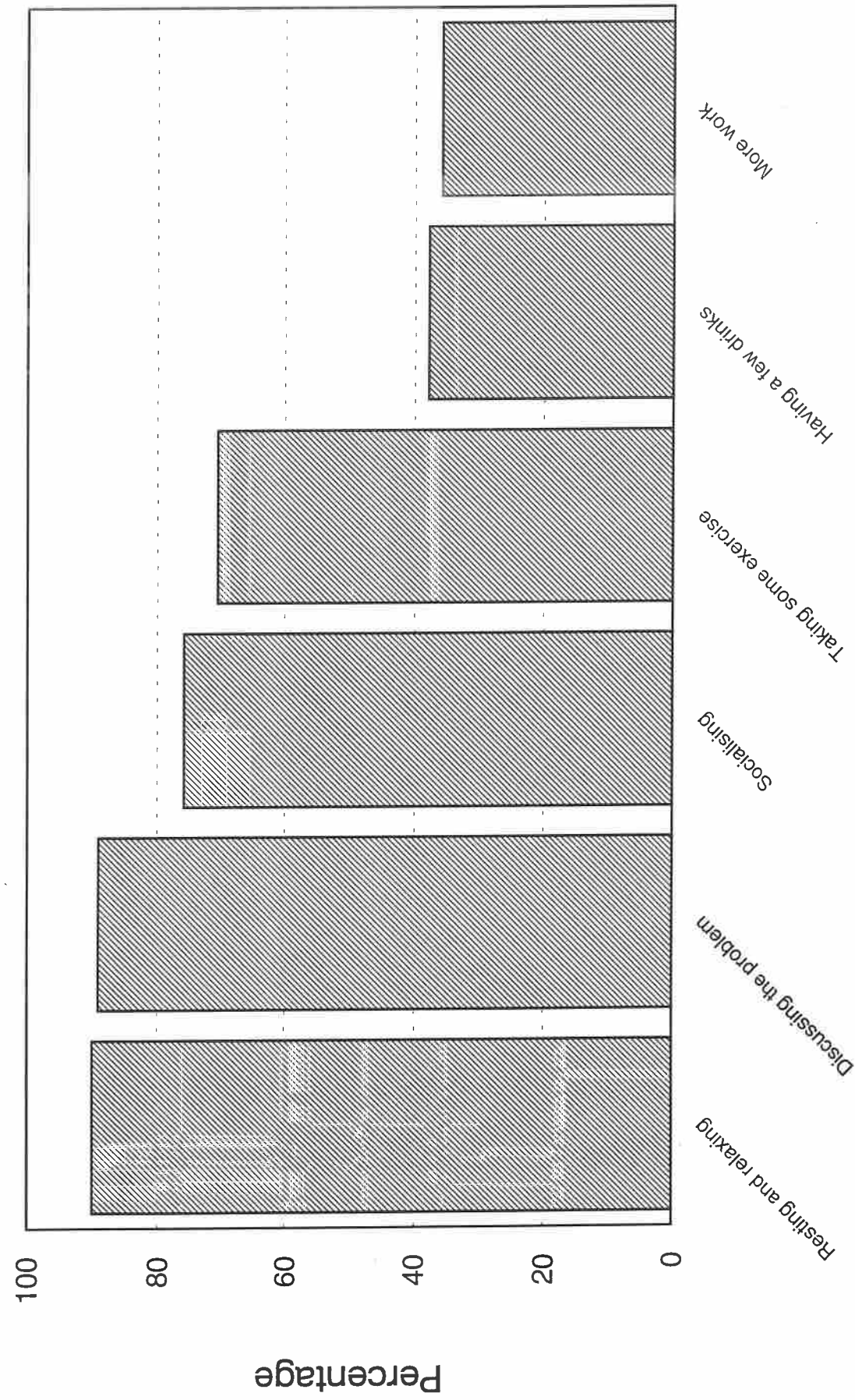


Figure 9.4 Factors that are vary or fairly effective reduce anxiety



10. ROAD SAFETY AND FIRST AID

Each person in the survey was asked a series of questions concerning road safety and knowledge of first aid.

Road Safety and Transport

Table 10.1 gives the breakdown of responses for various road issues. Thirty per cent of those in the survey neither insist on their children wearing seat belts, nor ensure that their children wear safety helmets. Forty-eight per cent of road users in the survey use unleaded petrol.

First Aid

The results of people's knowledge concerning first aid seem quite positive (Table 10.2). The vast majority of people know how to put someone in the recovery position and how to take a pulse (64% and 77% respectively) and over half (51%) know how to give cardio-pulmonary resuscitation. Of those who did not know any of these tasks, most (68%) would like to learn how to do them.

Table 10.1 - Questions about Transport and Road Safety

	Frequency	Percent
Do you transport children in a car or van		
Yes	163	40.8%
No	237	59.3%
Total	400	100.0%
Do you use rear seat belts for the children		
Always	149	47.3%
Occasionally	63	20.0%
Never	103	32.7%
Total	315	100.0%

	Frequency	Percent
Do children wear safety helmets on bikes		
Always	75	48.4%
Occasionally	33	21.3%
Never	47	30.3%
Total	155	100.0%
Which petrol do you use in your car/van		
Leaded	218	41.4%
Unleaded	251	47.6%
Diesel	4	0.8%
Leaded and Unleaded	54	10.2%
Total	527	100.0%

Table 10.2 - Questions about First Aid

	Frequency	Percent
Do you know how to take your pulse?		
Yes	477	77.3%
No	140	22.7%
Total	617	100.0%
Do you know how to give cardio-pulmonary resuscitation?		
Yes	315	51.3%
No	299	48.7%
Total	614	100.0%
Do you know how to put somebody in the recovery position?		
Yes	392	64.2%
No	219	35.8%
Total	611	100.0%
If no, would you like to learn how to do them?		
Yes	224	67.5%
No	108	32.5%
Total	332	100.0%

11. PREGNANCY

Eleven women in the survey sample reported themselves as being pregnant. Four were still smokers (one a light smoker, three medium), although all of these stated that they would like to give up. All the pregnant women tended to agree that smoking was both detrimental to one's health and one's family's health.

Two of the pregnant women said that they were regular drinkers, but the one person who recorded her drinking in units drank within safe limits.

12. HEALTH

The first question each person in the survey was asked was to rate how good their health had been in the previous twelve months into the following three categories:

Good

Fairly Good

Not Good

Sixty-one percent of people in the survey classified their health as 'good', and 32% and 7% as 'fairly good' and 'not good' respectively. For subsequent analysis the categories 'good' and 'fairly good' were merged into one category and compared with the following variables:

Do you have any long standing illness

Body Mass Index

Smoking habit

Are you eating a different diet from this time 3 years ago

Do you feel you do enough exercise

How often do you drink alcohol

Which statement best describes your eating habits

What sex are you

What is your marital status

How old were you when you left full time education

What type of housing do you live in

Age categories

A multiple logistic regression was then performed to see which of these factors determined the health status of each individual. Age and sex were not significant (Tables 12.1 to 12.4) but were kept in the analysis as they may have a strong influencing effect on the other factors. Table 12.5 gives the breakdown of the final significant variables.

Table 12.1 - Health by Sex

What sex are you	Health Status		Row Total
	Good/Fairly Good	Not Good	
Male	258 (94.2%)	16 (5.8%)	274 (100.0%)
Female	325 (92.3%)	27 (7.7%)	352 (100.0%)
Column Total	583 (93.1%)	43 (6.9%)	626 (100.0%)

Table 12.2 - Health by Age

	Health Status		Row Total
	Good/Fairly Good	Not Good	
Age Categories			
18 to 24	67 (93.1%)	5 (6.9%)	72 (100.0%)
25 to 34	116 (96.7%)	4 (3.3%)	120 (100.0%)
35 to 44	103 (94.5%)	6 (5.5%)	109 (100.0%)
45 to 54	88 (94.6%)	5 (5.4%)	93 (100.0%)
55 to 64	85 (90.4%)	9 (9.6%)	94 (100.0%)
65+	122 (89.7%)	14 (10.3%)	136 (100.0%)
Column Total	581 (93.1%)	43 (6.9%)	624 (100.0%)

Table 12.3 - Health by Age for Males

	Health Status		Row Total
	Good/Fairly Good	Not Good	
Age Categories			
18 to 24	27 (93.1%)	2 (6.9%)	29 (100.0%)
25 to 34	56 (98.2%)	1 (1.8%)	57 (100.0%)
35 to 44	47 (94.0%)	3 (6.0%)	50 (100.0%)
45 to 54	36 (97.3%)	1 (2.7%)	37 (100.0%)
55 to 64	43 (91.5%)	4 (8.5%)	47 (100.0%)
65+	47 (90.4%)	5 (9.6%)	52 (100.0%)
Column Total	256 (94.1%)	16 (5.9%)	272 (100.0%)

Table 12.4 - Health by Age for Females

	Health Status		Row Total
	Good/Fairly Good	Not Good	
Age Categories			
18 to 24	40 (93.0%)	3 (7.0%)	43 (100.0%)
25 to 34	60 (95.2%)	3 (4.8%)	63 (100.0%)
35 to 44	56 (94.9%)	3 (5.1%)	59 (100.0%)
45 to 54	52 (92.9%)	4 (7.1%)	56 (100.0%)
55 to 64	42 (89.4%)	5 (10.6%)	47 (100.0%)
65+	75 (89.3%)	9 (10.7%)	84 (100.0%)
Column Total	325 (92.3%)	27 (7.7%)	352 (100.0%)

Table 12.5 - Variables significantly associated with Health

Variable	Response	-2 log-likelihood χ^2	Degrees of freedom	P	Relative Risk	95% Confidence Interval
Long standing illness	-	22.71	1	<0.001	-	-
	No Yes	- -	- -	- -	0.07 1	0.02 to 0.27 -
Smoker	-	8.24	2	0.016	-	-
	Smoker	-	-	-	2.44	1.22 to 4.90
	Ex-smoker	-	-	-	0.38	0.17 to 0.87
	Never/Seldom smoked	-	-	-	1	-
Exercise compared to previous year	-	8.82	3	0.032	-	-
	Doing more	-	-	-	0.54	0.17 to 1.61
	Doing less	-	-	-	2.61	1.17 to 5.81
	About the same	-	-	-	0.61	0.28 to 1.35
	Not sure	-	-	-	1.00	-
Sleeping Pattern	-	6.07	2	0.048	-	-
	Sleep Well	-	-	-	0.45	0.23 to 088
	Sometimes	-	-	-	1.33	0.69 to 2.56
	Seldom sleep well	-	-	-	1	-
Housing	-	9.52	2	0.023	-	-
	Own home	-	-	-	1.83	0.00 to 0.00
	States housing	-	-	-	13.56	0.00 to 0.00
	Private rental	-	-	-	2.63	0.00 to 0.00
	Other	-	-	-	1	-
Sex	-	1.42	1	0.234	-	-
	Female	-	-	-	1.85	0.67 to 5.11
	Male	-	-	-	1	-
Age	Ordered	2.630	1	0.11	1.29	0.95 to 1.76

Interpretation of the Results

The results obtained are pretty much what one may have expected prior to the analysis. People with a long standing illness are 14 times more likely to record their health as not good compared to someone without any illness. Smokers are nearly 2.5 times more likely to report ill health compared to non-smokers, and nearly 6.5 times more likely compared to ex-smokers. People doing less exercise than the previous year are 5 times more likely to record poor health in comparison to people doing more exercise, and 4 times more likely compared to people doing the same amount of exercise. People who sleep well are half as likely to report their health not being good compared to those who seldom sleep well. Finally people in states housing are over 7 times and 5 times more likely, compared to own home owners and people who rent privately respectively, to report their health as being poor. All these values are corrected for by both age and sex, and other responses.

