

Perceptions of Risk Survey 2008: Key Findings

Health Evaluation & Equalities Team
and the
Statistical Information Team,
Cancer Research UK.

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Executive summary

Introduction and methods

- This report describes the key findings from a Cancer Research UK survey of approximately 4,000 people from around the UK which aimed to find out what they know about cancers signs, symptoms and risk factors.
- The report focuses on comparing awareness between males and females and between White and non-White groups. Only differences that reached statistical significance are reported (see appendix 1 for more detail).
- Data was collected by the British Market Research Bureau (BMRB) as part of their face-to-face Omnibus survey which generates a nationally representative sample of adults across the UK.
- Questions were 'open' (unprompted), capturing respondent's ability to recall cancer related facts, and closed (prompted), assessing respondents ability to recognise cancer related facts from a list of options.

Results

Awareness of cancer signs and symptoms

Unprompted awareness

- 14% of those surveyed could not name any signs or symptoms of cancer (unprompted).
- The most well known cancer signs or symptoms included: lumps (56%), skin problems (25%), bowel, urinary or genital problems (19%), sudden or dramatic weight loss (19%), and a change in a mole (17%).
- Less well known were loss of appetite, hair loss, nausea and swellings with only around 3% of respondents mentioning these signs.
- Females generally showed higher knowledge of cancer signs and symptoms compared with males; for example, 67% females mentioned lumps compared with 45% of males.
- White participants generally had higher awareness than non-White participants, for example, 20% White respondents mentioned sudden or dramatic weight loss compared with 10% of non-White respondents.

Prompted awareness

- Overall, people were better at recognising cancer signs or symptoms from a list of options than recalling them from memory. For example, almost 8 out of 10 people (78%) chose 'change in a mole' from a prompted list, whereas less than 1 in 5 (17%) mentioned anything to do with moles when they were asked to recall cancer signs from memory.
- Females showed better recognition of cancer signs compared with males, for example, 53% of females recognised bowel motion changes as a sign of cancer compared with 39% of males.

- White respondents generally showed higher recognition of cancer signs and symptoms compared with non-White groups, for example, 69% of White respondents recognised that 'blood in your urine or bowel motions' could be a sign of cancer compared with 42% of non-White respondents.

Awareness of cancer risk factors

- The survey included three questions designed to assess awareness of risk factors for cancer. Two questions focused on risk factors associated with lifestyle behaviours such as diet or exercise, the remaining question measured awareness of all risk factors for cancer, including lifestyle behaviours.

Lifestyle cancer risk factors

Unprompted awareness

- Stopping smoking was the most common lifestyle risk factor known about by 66% of respondents, yet only 3% knew about the need to maintain a healthy weight.
- Less than a third of respondents mentioned exercise (29%), 20% said alcohol and 10% knew that taking care in the sun could help reduce cancer risk.
- Females generally showed higher awareness than males, for example, 62% of females mentioned that diet could help reduce cancer risk compared with 57% of males.
- White respondents showed higher levels of awareness than non-White respondents; 67% White participants knew that reducing/stopping smoking and avoiding smoky places could reduce the risk of cancer compared with 52% non-White participants.

Prompted awareness

- Stopping smoking, taking care in the sun and attending cancer screening were well known as factors that could reduce cancer risk (>72%). In contrast, drinking alcohol in moderation (or not drinking) and maintaining a healthy weight were less well recognised (≤45%).
- Awareness of sun exposure was eight times higher (81% vs.10%) when participants were given a prompted list to choose from compared to when they were asked to recall cancer risk factors from memory.
- Females were better at recognising lifestyle risks compared with males; 83% females recognised sun exposure as a risk compared with 78% males.
- White respondents showed higher recognition than non-White respondents, for example 66% White participants recognised that a smoky environment could increase cancer risk compared with 49% non-White participants.

General cancer risk factors

Prompted awareness

- Awareness of smoking and getting sunburnt as general risk factors for cancer was high (≥74%). In contrast, recognition that taking hormone treatment (like Hormone Replacement Therapy, or the birth control pill), being physically inactive, or getting an infection from certain viruses or bacteria could increase cancer risk was low (≤25%).
- Females were generally more likely to think that the risk factors presented to them (from a list of possible general cancer risk factors) could increase a person's chance of developing cancer



compared with males. However this list deliberately included myths which females were also more likely to think were cancer risk factors, such as 'living near power lines' (24% vs.19%) and using underarm deodorant (12% vs. 7%).

- White respondents had higher awareness than non-White groups of several risk factors, for example 57% White respondents correctly thought that having a close relative with cancer could increase cancer risk compared with 33% of non-White respondents.

Awareness of NHS cancer screening programmes

- Awareness of the breast cancer screening programme was higher (86%) than for the cervical (53%) and bowel cancer screening programme (28%).
- Several people mistakenly believed there were prostate (38%) and lung cancer (25%) NHS national screening programmes.
- Females were more aware of the breast and cervical cancer screening programmes compared with males, for example, 92% females were aware of the breast programme compared with 80% males.
- Non-White participants had lower awareness of all NHS cancer screening programmes compared with White respondents, for example 29% of White respondents knew there was a bowel cancer screening programme offered by the NHS compared with 19% of non-White respondents.

Sun and sunbeds

- More than two in ten (22%) respondents admitted to being sunburnt in the previous year.
- The majority of people surveyed (70%) disagreed that sun-bed tanning was safer than sun tanning.

Limitations of this study

A major limitation of this study is that analysis was restricted to a comparison between men and women, and white and non-white respondents only and did not control for differences in social economic background.

Since this survey was commissioned a new awareness measurement tool has been developed; the Cancer Research UK Cancer Awareness Measure (CAM). The CAM will be used for the foreseeable future to inform similar studies. While the questions included in the CAM are similar to those used in this survey, they have recently been validated and expertly peer reviewed. The National Awareness and Early Diagnosis Initiative (NAEDI) is encouraging the use of the CAM nationally, especially by NHS organisations. The intention is that over time there should be more comparable data collected and analysed that will be helpful to those planning and evaluating initiatives designed to improve public awareness of cancer risk factors, signs and symptoms of cancer and national screening programmes. The new measure also contains additional questions that will enable a better understanding of people's help-seeking behaviour. A facility has been set up to help capture data from the CAM and it is the intention that all data will be lodged with the UK Data Archive at www.ukda.ac.uk and accessible to all.

Recommendations

This is very useful data which enables a number of recommendations to be made.

- Further analyses of this type should consider variations in awareness according to UK region and social economic background. It would also be interesting to assess trends in awareness of cancer signs and risk factors over time since the survey has been carried out annually since 2004.
 - There is significant room for improvement in raising awareness of several cancer signs, symptoms and risk factors, in particular, the association between weight and cancer and alcohol and cancer.
 - Initiatives designed to reduce the knowledge gap between males and females should be explored, piloted and evaluated, particularly because recent evidence points to males being at increased risk of cancer compared with females (National Cancer Intelligence Network, Cancer Research UK, The Centre for Men's Health at Leeds Metropolitan University and Men's Health Forum, 2009).
 - There is a pressing need for awareness raising initiatives that target ethnic minority groups who showed lower knowledge of most cancer signs and risk factors and NHS cancer screening programmes. This is particularly important in light of evidence that some ethnic minority groups have a higher rates of certain types of cancer (National Cancer Intelligence Network and Cancer Research UK, 2009) and evidence suggesting that cancer incidence among some ethnic minority groups could be increasing (Smith et al, 2003).
 - Less than a third of respondents were aware there was an NHS Bowel Cancer Screening Programme. Efforts should be made to raise the profile of this programme to help ensure we achieve maximum uptake, increasing the chances of earlier diagnosis.
 - There is a need to raise awareness of the dangers of sun exposure in the UK and ways to reduce the risk of sunburn.
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1. Introduction and methods

This report describes the key findings from a Cancer Research UK survey of the UK population which aimed to find out what they know about cancers signs, symptoms and risk factors. It focuses on comparing awareness between males and females and between White and non-White groups. Only differences that reached statistical significance are reported (see appendix 1 for more detail).

The survey sampled approximately 4,000 people from around the UK and was carried out by the British Market Research Bureau (BMRB) in October 2008. Data were collected as part of their weekly face-to-face Omnibus survey which generates a nationally representative sample of adults. Further details about the methods and data analysis are given in appendix 1.

The survey covered four main topics, awareness of: cancer signs and symptoms; cancer risk factors, including lifestyle factors associated with cancer risk; NHS cancer screening programmes; frequency of sunburn and attitudes towards sun-tanning and sunbeds (see appendix 2 for the full questionnaire). Questions were 'open' (unprompted), capturing respondents ability to recall cancer related facts, and closed (prompted), assessing respondents ability to recognise cancer related facts from a list of options.

2. Results

2.1. Sample

A total of 4,060 people were interviewed. People who had previously taken part in the Cancer Awareness Measure (CAM) Office for National Statistics (ONS) survey carried out in September and October 2008 were excluded (n=113)¹, resulting in an overall sample size of n=3,947.

After weighting had been applied to allow for the survey design, the sample consisted of slightly more females (51%) than males (48.6%) and most of the sample said they were 'White' (90.1%) compared with another ethnic group (9.7% labelled 'non-White' in this report, 0.2% labelled 'N/A'). This shows a good representation of the UK population where 7.9% belong to 'non-White' groups (ONS, 2001).

The figures and corresponding tables in this report show the following:

- Overall results for the whole sample
- Results for categories showing statistically significant differences by gender compared with overall results (males are shown in blue, females in pink)
- Results for categories showing differences by ethnicity compared with overall results (White respondents are shown in purple and non-White respondents in green).
- Where relevant, negative responses e.g. 'Don't know' or 'None/nothing' are presented.

¹ Results from the CAM ONS survey can be found on the Department of Health website:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_108749

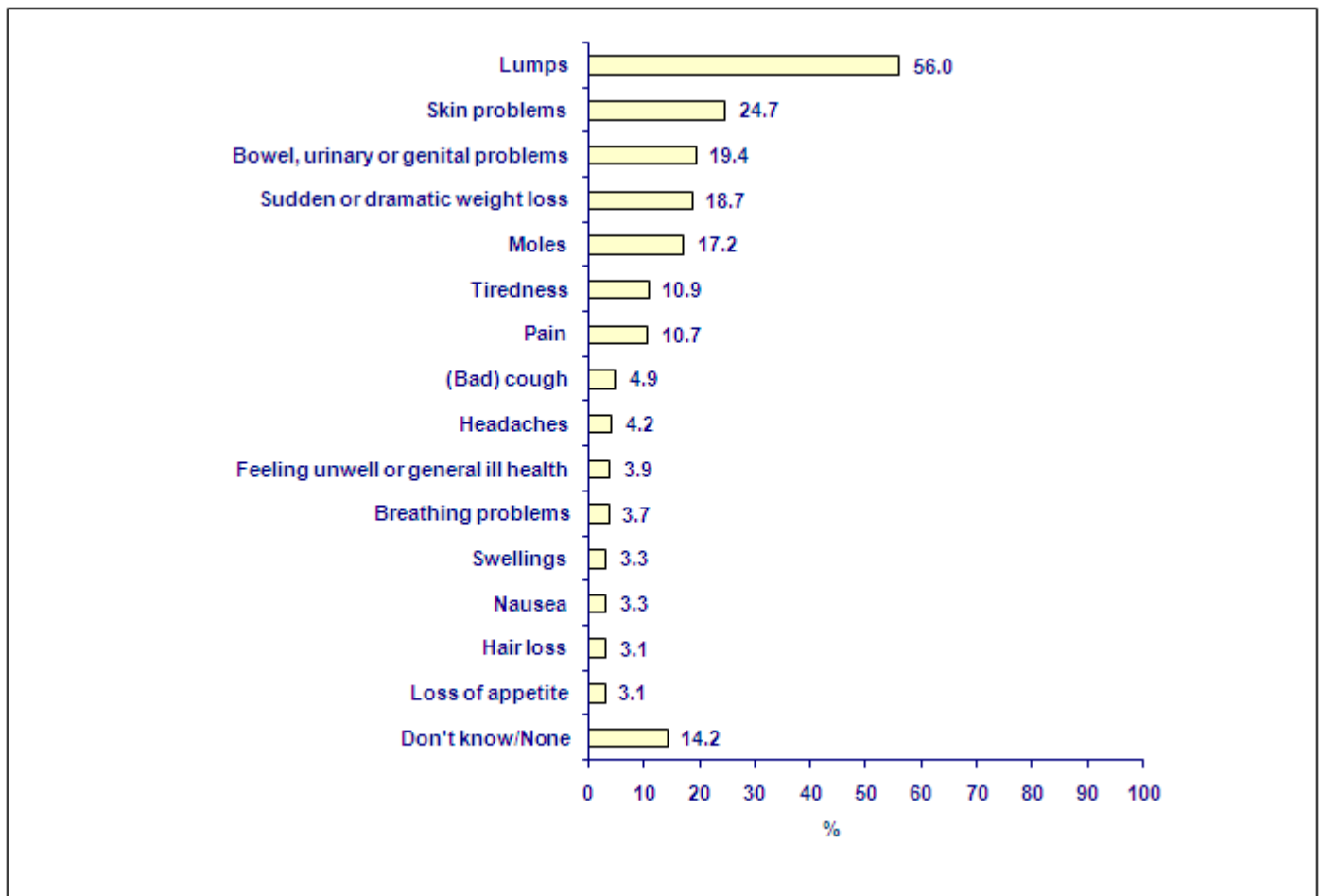
2.2. Awareness of cancer signs and symptoms

Unprompted awareness of cancer signs and symptoms

We asked respondents: “Can you name any signs or symptoms that could be an indication of cancer?” (Question 2 on survey)²

Over half of respondents (56%) were aware of ‘lumps’ as a symptom of cancer. Knowledge of other signs was lower; 25% participants mentioned skin problems, 19% mentioned bowel, urinary or genital problems, or sudden weight loss and 17% recalled change in a mole. In total 14% of respondents could not name any signs or symptoms (see Figure 1, Table 1 in appendix 4).

Figure 1: Awareness of cancer signs and symptoms (unprompted)

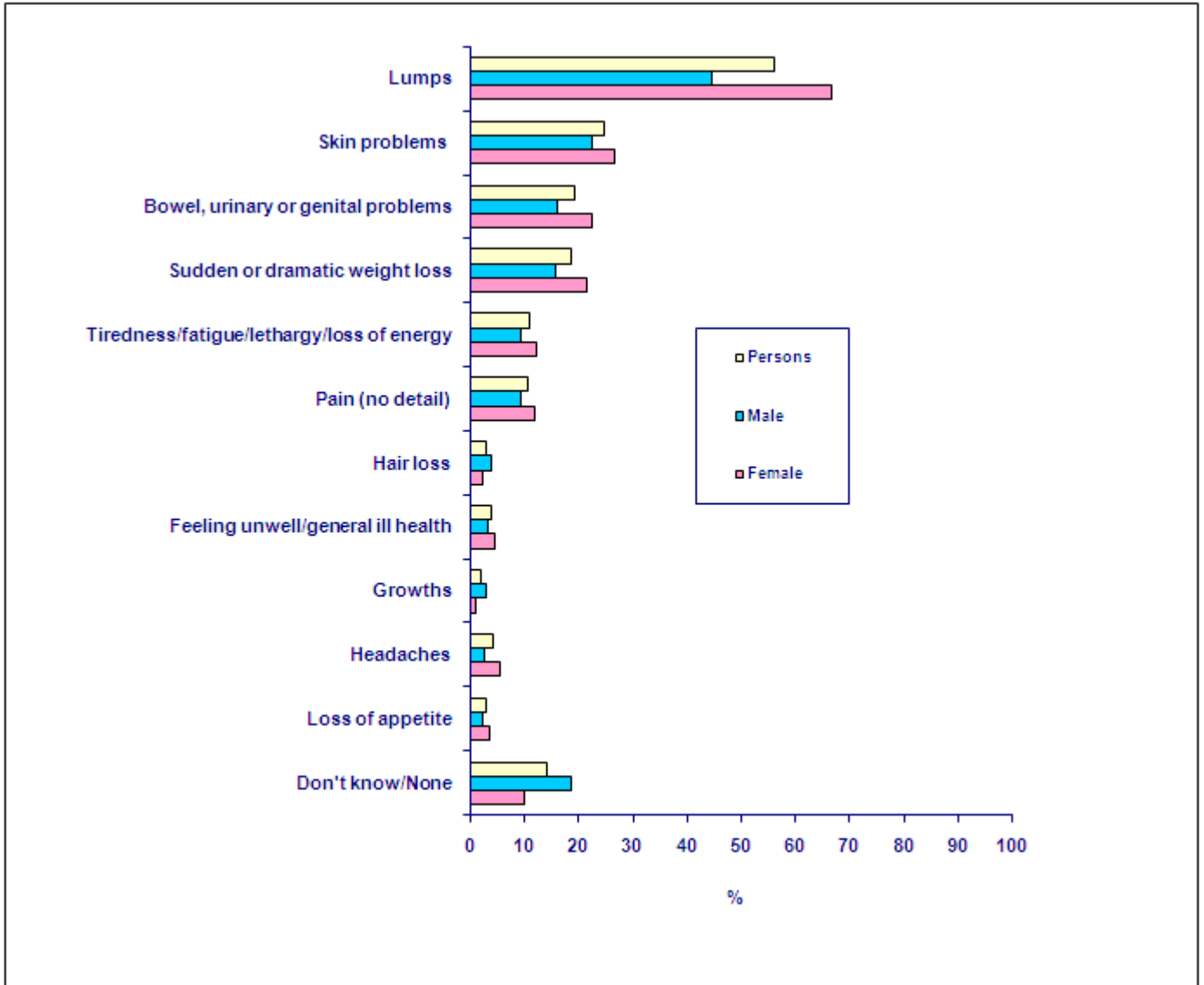


Answers mentioned by less than 3% of respondents are not shown; further details are given in appendix 3.

² Please refer to appendix 5 to see how responses to this question were categorised.

Overall, females did better than males; for example, 67% females were able to recall that a lump could be a sign of cancer compared with 45% males. Males were also less likely to be able to mention any sign or symptom with 19% responding 'don't know/none' compared with 10% females (see Figure 2, Table 2 in appendix 4).

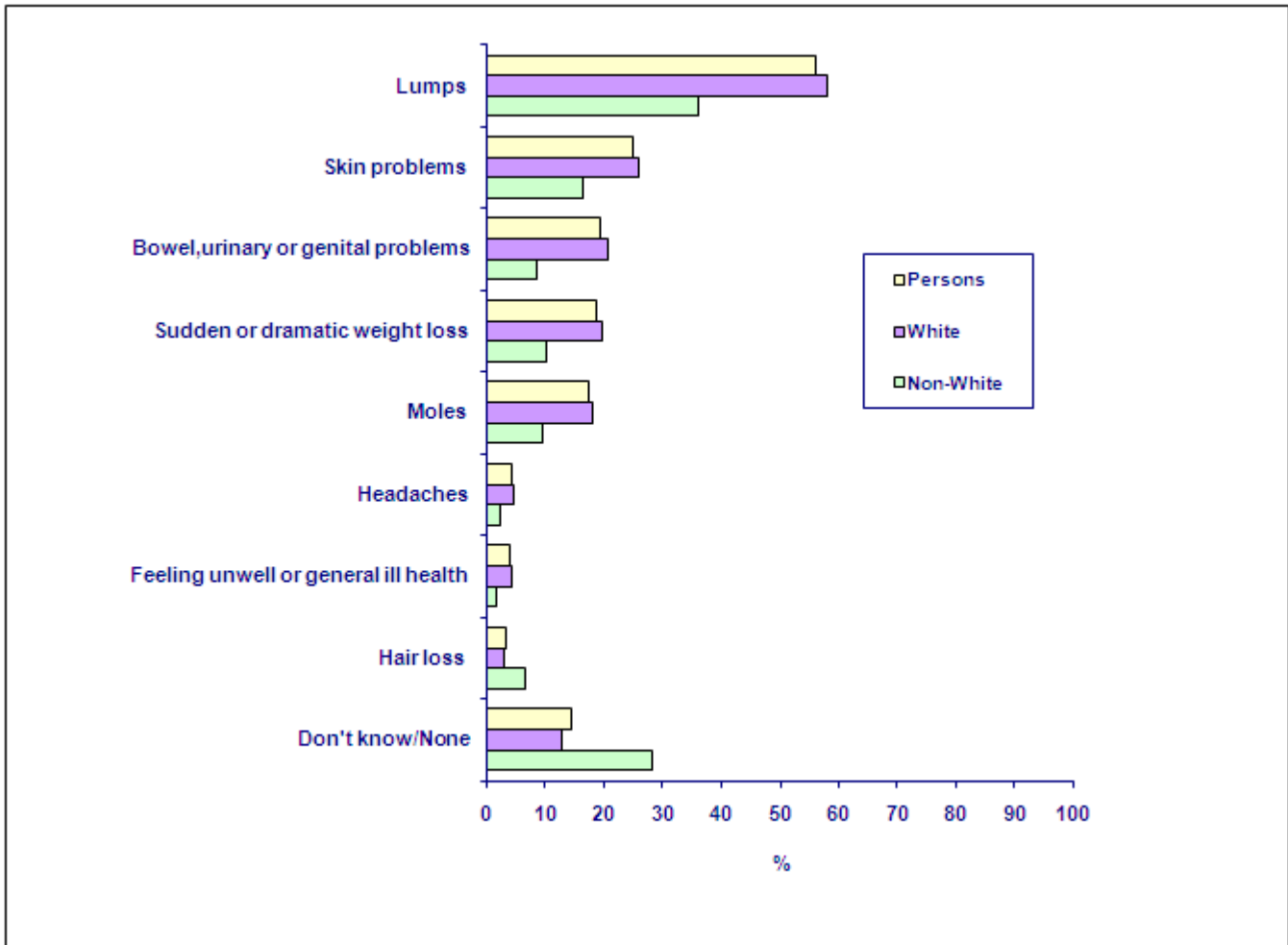
Figure 2: Awareness of cancer signs and symptoms (unprompted) by gender



Only options where the responses of males and females were significantly different and were mentioned by at least 3% of respondents are shown.

In general, White participants were more likely to recall signs of cancer than non-White participants. Around a quarter of non-White participants (28%) said they did not know of any signs or symptoms of cancer compared with 13% of White respondents. However, non-White participants were more likely to mention symptoms relating to hair loss compared with White participants (see Figure 3, Table 3, appendix 4).

Figure 3: Awareness of cancer signs and symptoms (unprompted) by ethnicity



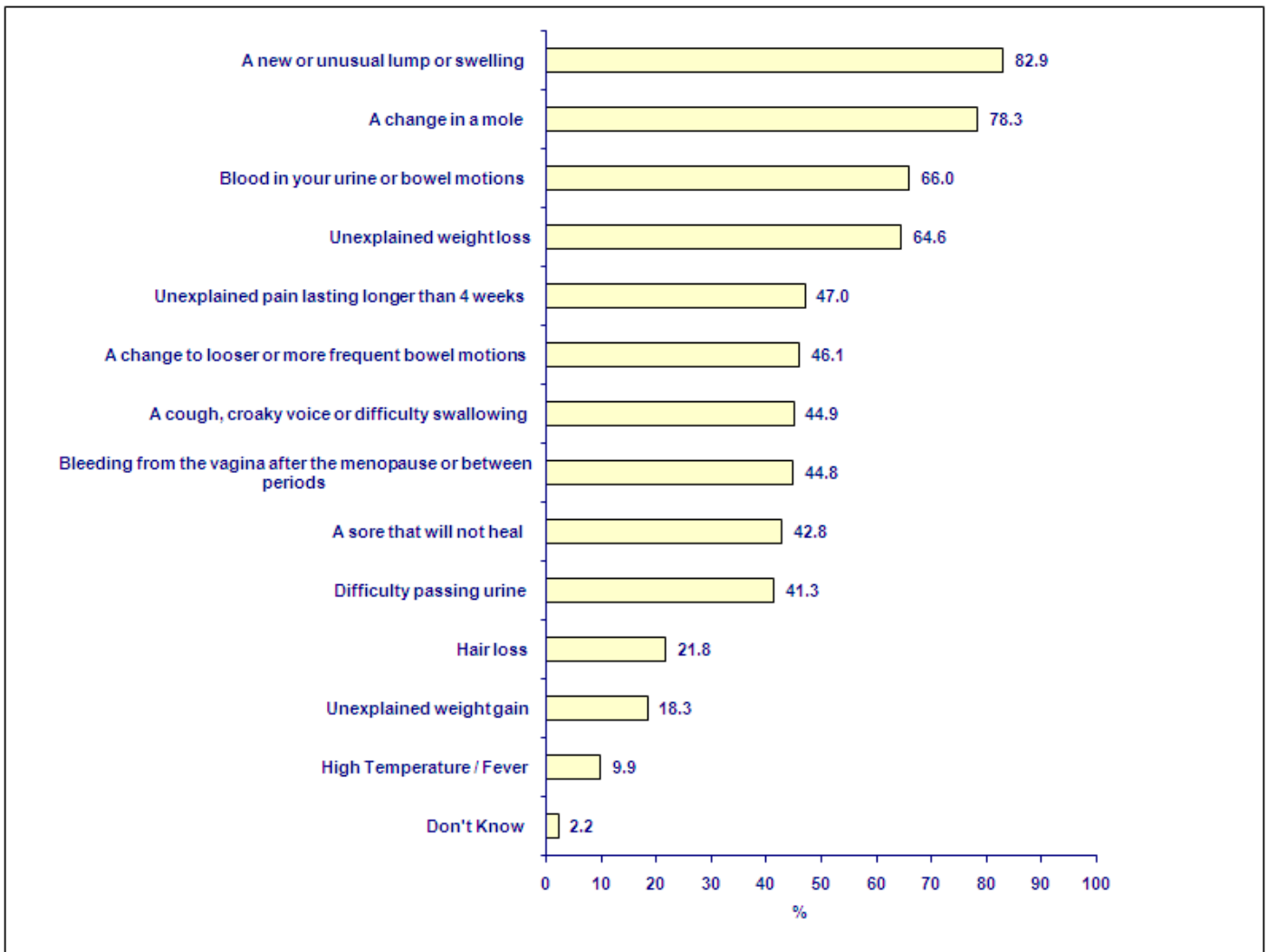
Only options where the responses of White and non-White participants were significantly different and were mentioned by at least 3% of respondents are shown.

Prompted awareness of cancer signs and symptoms

We asked respondents: “Which of the following do you think could be early signs of cancer? You may choose as many answers as you like” (Question 5 on survey)³.

Giving respondents a list of response options to choose from produced higher scores compared to the recall question (unprompted). An unusual lump or swelling was recognised by 83% of respondents, 78% correctly identified ‘change in a mole’, 66% thought that ‘blood in your urine or bowel motions’ could be a sign of cancer and 65% thought unexplained weight loss could be sign. ‘Hair loss’ (22%), unexplained weight gain (18%) and ‘high temperature or fever’ (10%) were less well recognised (see Figure 4, Table 4 in appendix 4).

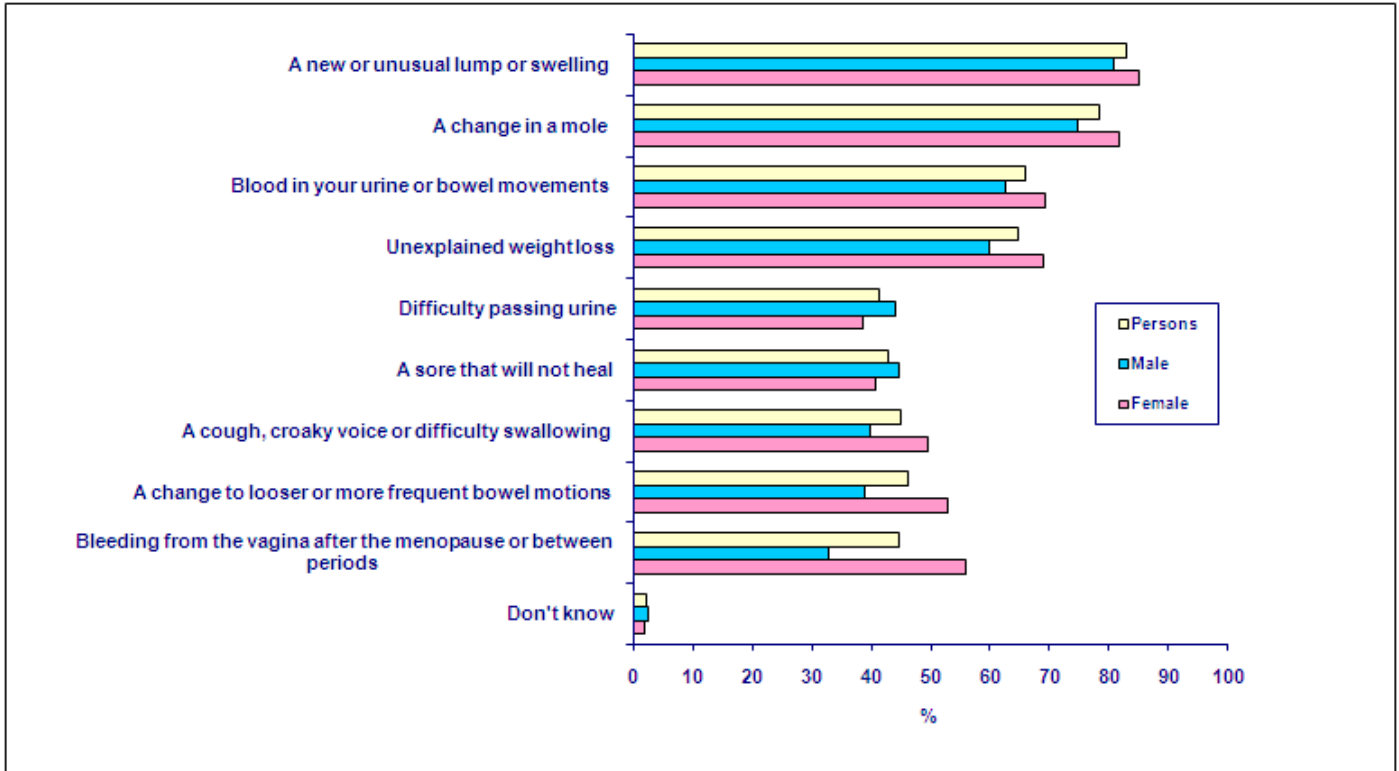
Figure 4: Awareness of cancer signs and symptoms (prompted)



³ See appendix 2 for the complete list of response options for Question 5.

On the whole, females were more able to correctly identify cancer signs and symptoms than males. For example, 53% of females recognised bowel motion changes as a sign of cancer compared with 39% males. There was one exception; males were more likely to think that 'difficulty passing urine' could be a sign of cancer compared with females (44% vs. 39%) (see Figure 5, Table 5 in appendix 4).

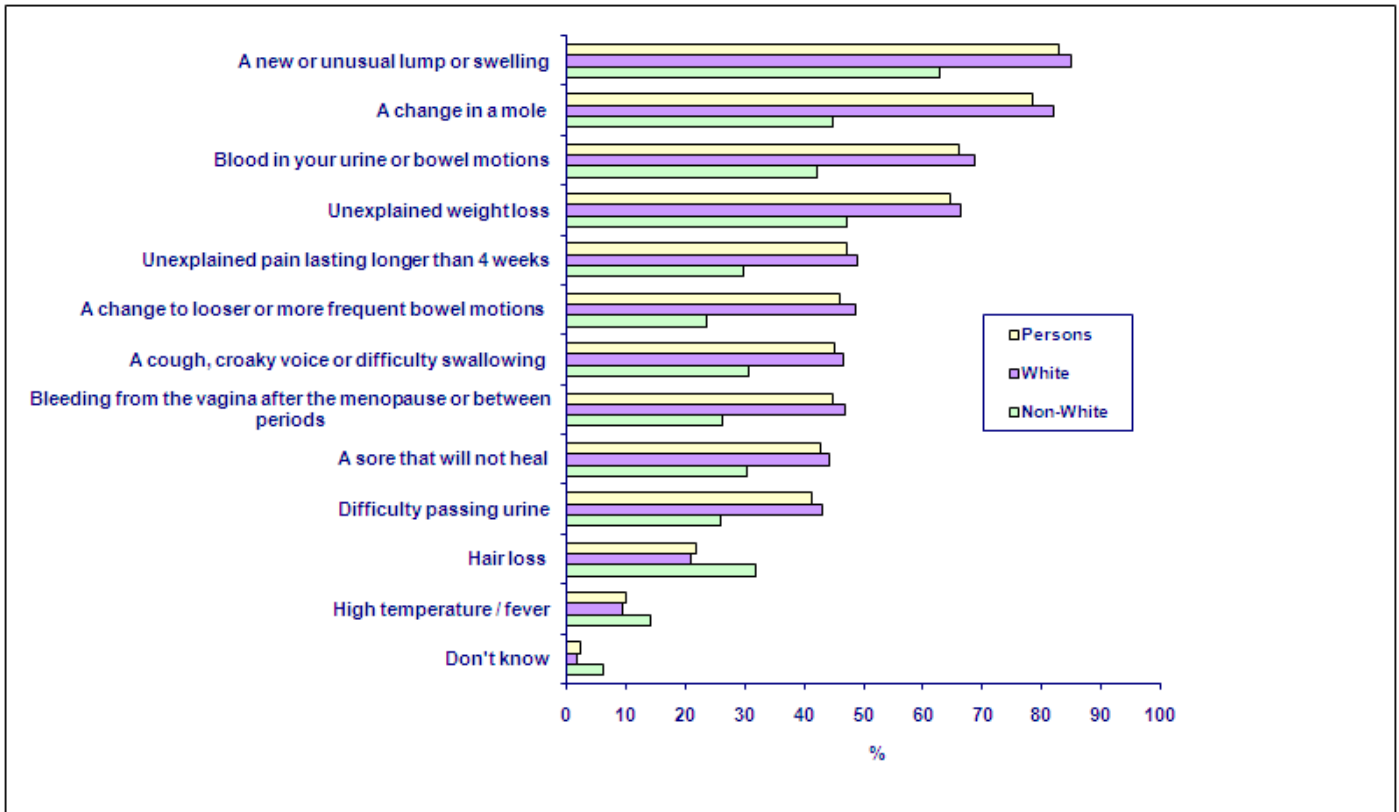
Figure 5: Awareness of cancer signs and symptoms (prompted) by gender



Apart from the 'Don't know' option where there was no significant difference, only options where the responses of males and females were significantly different are shown in the figure.

Overall, White respondents were more able to recognise signs and symptoms than non-White respondents; for example, 69% of White respondents recognised that blood in your urine or bowel motions could be a sign of cancer compared with 42% of non-White respondents. However, symptoms relating to hair loss and high temperature/fever were chosen by significantly more non-White participants than White participants (see Figure 6, Table 6 in appendix 4).

Figure 6: Awareness of cancer signs and symptoms (prompted) by ethnicity



Only options where the responses of males and females were significantly different and were mentioned by at least 3% of respondents are shown.

Summary: Awareness of cancer signs and symptoms

Unprompted awareness

- 14% of those surveyed could not name any signs or symptoms of cancer (unprompted).
- The most well known cancer signs or symptoms included: lumps (56%), skin problems (25%), bowel, urinary or genital problems (19%), sudden or dramatic weight loss (19%), and a change in a mole (17%).
- Less well known were loss of appetite, hair loss, nausea and swellings with only around 3% of respondents mentioning these signs.
- Females generally showed higher knowledge of cancer signs and symptoms compared with males; for example, 67% females mentioned lumps compared with 45% of males.
- White participants generally had higher awareness than non-White participants, for example, 20% White respondents mentioned sudden or dramatic weight loss compared with 10% of non-White respondents.

Prompted awareness

- Overall, people were better at recognising cancer signs or symptoms from a list of options than recalling them from memory. For example, almost 8 out of 10 people (78%) chose 'change in a mole' from a prompted list, whereas less than 1 in 5 (17%) mentioned anything to do with moles when they were asked to recall cancer signs from memory.
- Females showed better recognition of cancer signs compared with males, for example, 53% of females recognised bowel motion changes as a sign of cancer compared with 39% of males.
- White respondents generally showed higher recognition of cancer signs and symptoms compared with non-White groups, for example, 69% of White respondents recognised that 'blood in your urine or bowel motions' could be a sign of cancer compared with 42% of non-White respondents.

2.3 Awareness of cancer risk factors

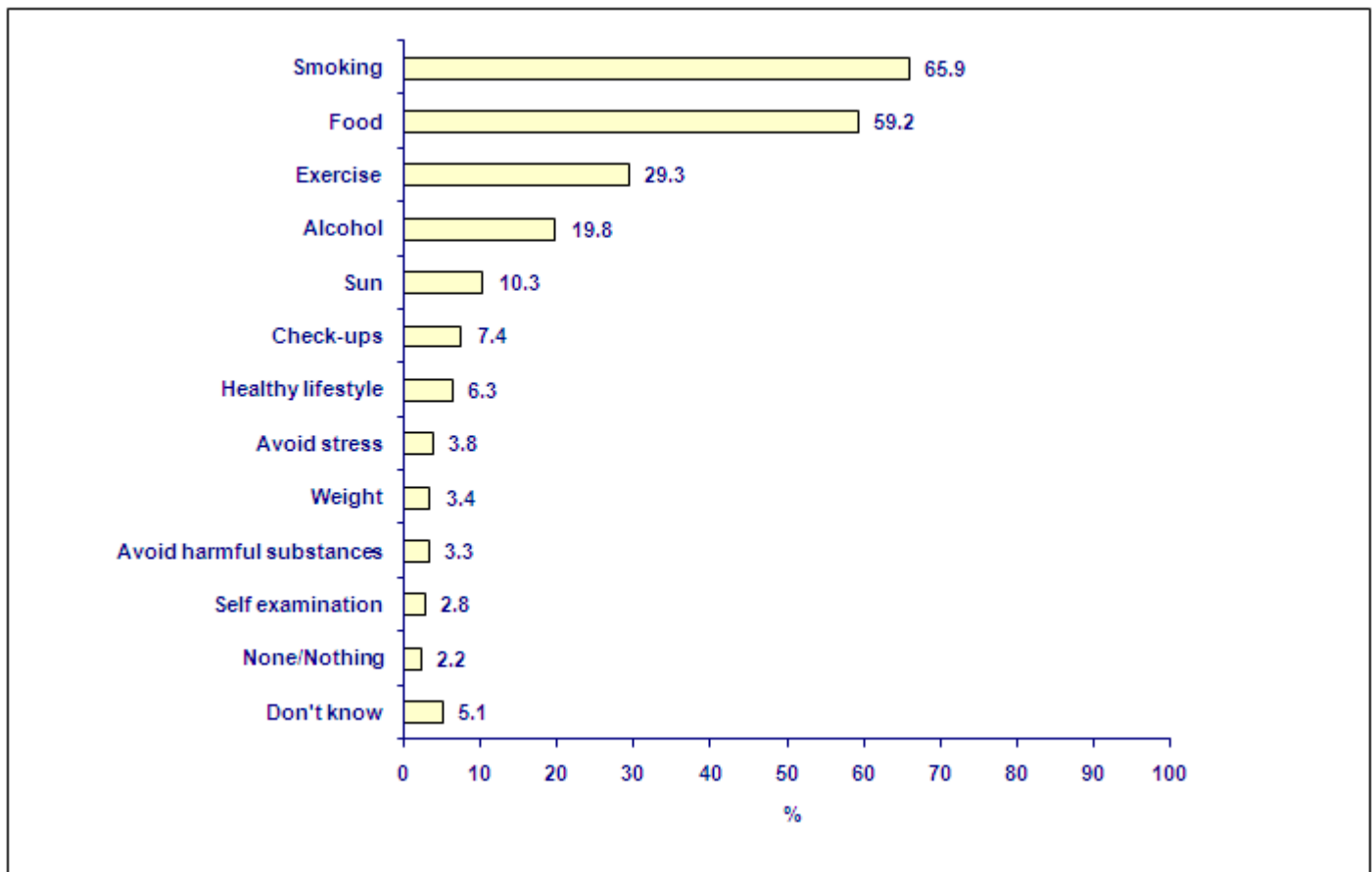
Lifestyle risk factors

Unprompted awareness of cancer lifestyle risk factors

We asked respondents: “What do you think are the main changes that people can make to their lifestyle to reduce the risk of developing some types of cancer? Please mention all that come to mind” (Question 3 on survey)⁴.

Smoking was the most common lifestyle change mentioned by 66% of respondents. Changes to diet were also well recalled (59%), yet only 3% mentioned weight. Less than a third of respondents (29%) mentioned exercise; 20% said alcohol and 10% remembered sun exposure (see Figure 7, Table 7 in appendix 4).

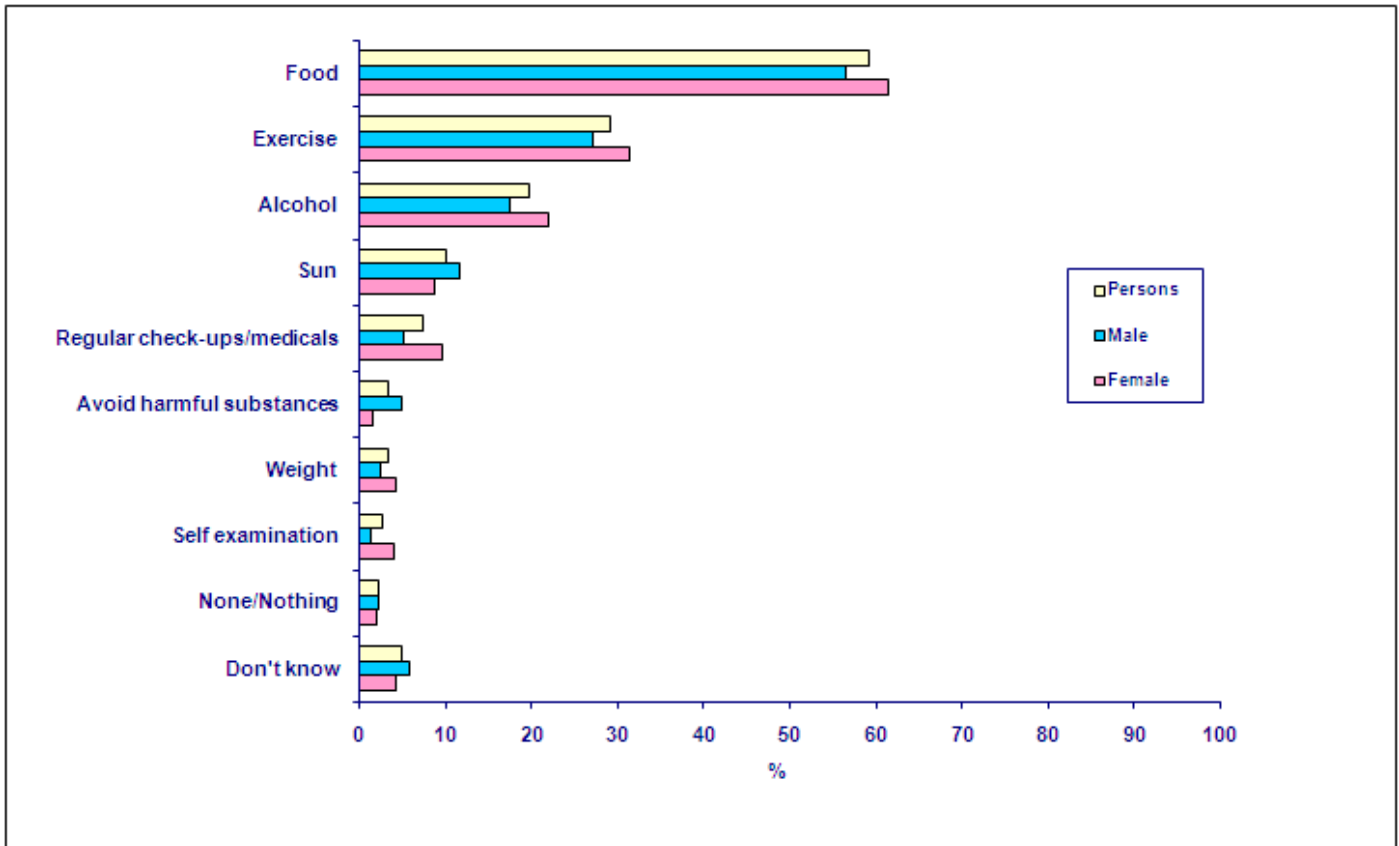
Figure 7: Awareness of lifestyle risk factors (unprompted)



⁴ Please refer to appendix 5 to see how responses to this question were categorised.

Females were more likely than males to mention diet, exercise, alcohol, check-ups/medicals, weight and self-examination as things that people could change about their lifestyle to reduce their risk of cancer; for example, 62% of females mentioned diet compared with 57% of males. Males however, were significantly more likely to be aware that reducing sun exposure and avoiding harmful substances can reduce the risk of developing some types of cancer (see Figure 8, Table 8 in appendix 4).

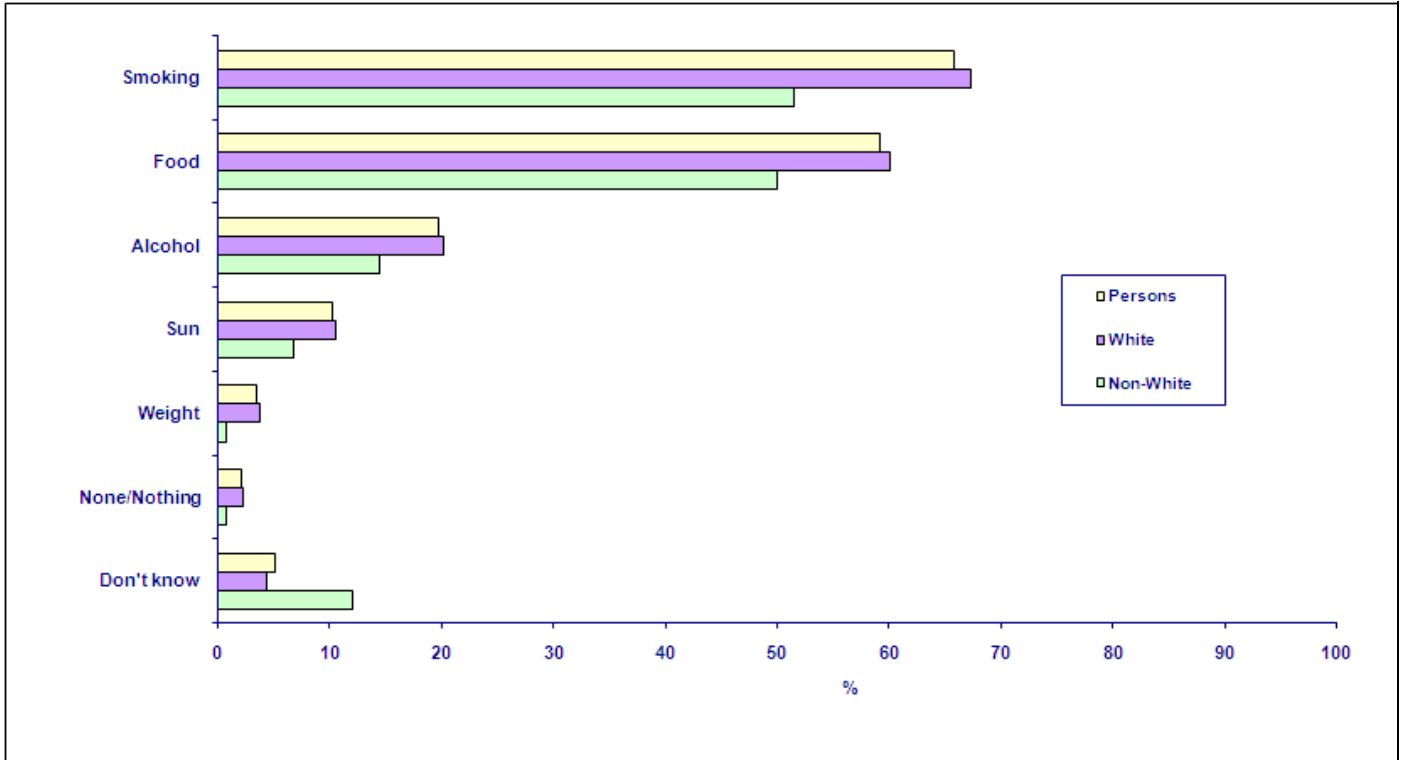
Figure 8: Awareness of lifestyle risk factors (unprompted) by gender



Apart from the 'Don't know' option where there was no significant difference, only options where the responses of males and females were significantly different and were mentioned by at least 3% of respondents are shown.

White participants showed a higher knowledge of the main lifestyle risk factors than non-White participants; 67% of White respondents knew that smoking is an important lifestyle change, compared with 52% of non-White respondents. Also, 12% of non-White participants said they did not know any lifestyle risk factors for cancer compared with 4% White respondents (see Figure 9, Table 9 in appendix 4).

Figure 9: Awareness of lifestyle risk factors (unprompted) by ethnicity



Only options where the responses of White and non-White participants were significantly different and were mentioned by at least 3% of respondents are shown.

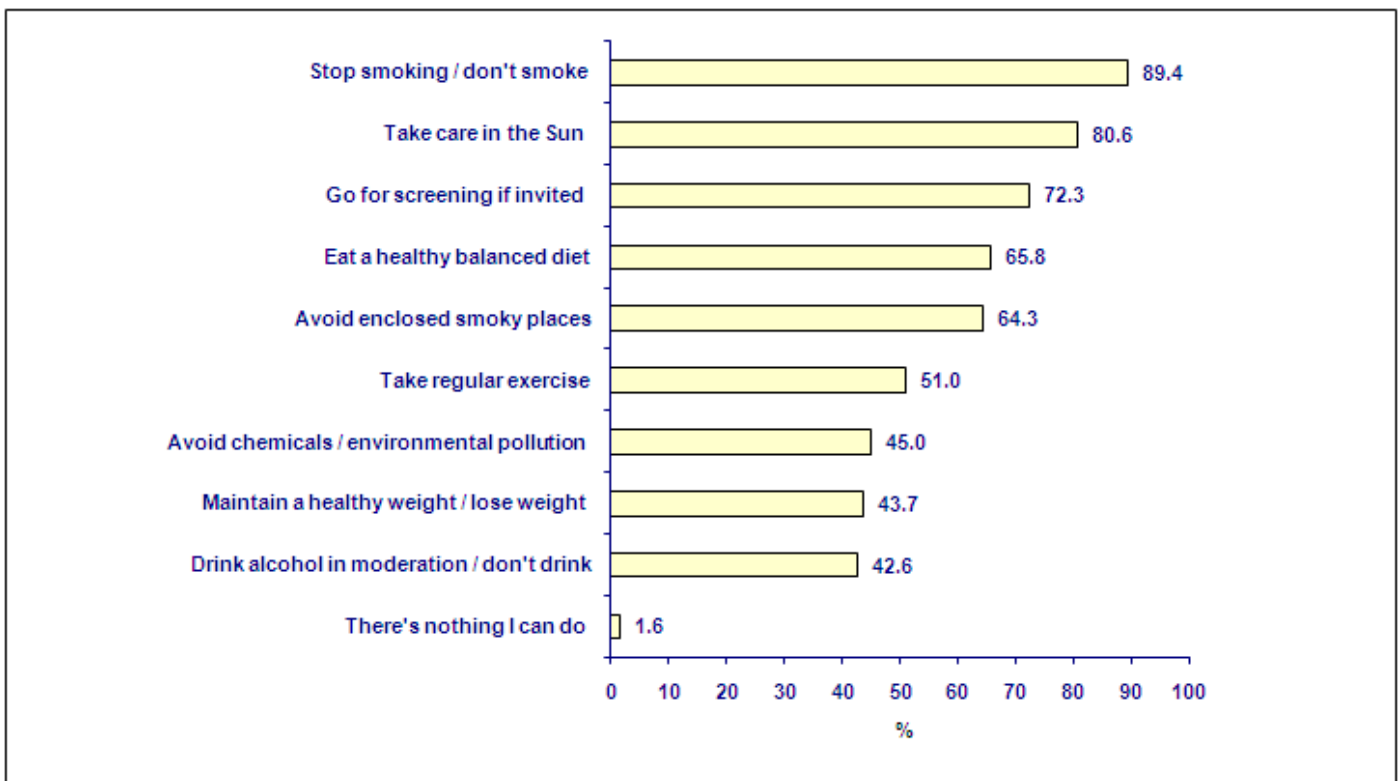
Prompted awareness of cancer lifestyle risk factors

We asked respondents: “Which of these things can people do to reduce the risk of developing some types of cancer?”(Question 8 on survey)⁵.

As with awareness of cancer signs, recognition (prompted) of risk factors showed higher scores than recall (unprompted) of risk factors. Stopping smoking (89%), taking care in the sun (81%), and taking part in cancer screening (72%) were well recognised as ways people could reduce their risk of cancer. Less well recognised were: avoiding chemicals or environmental pollution (45%), maintaining a healthy weight or losing weight (44%) and drinking in moderation (43%) (see Figure 10, Table 10 in appendix 4).

Some of the options given to respondents were ‘myths’, meaning there is no strong evidence they reduce the risk of cancer. These included: ‘drinking red wine’, ‘eating organic food’, ‘avoiding mobile phones’, and ‘taking vitamin supplements’. 15% respondents believed that drinking red wine could reduce the risk of cancer, 12% chose eating organic food, 10% endorsed avoiding mobile phones and 9% thought that taking vitamin supplements could reduce the risk of cancer (see Table 10a in appendix 4).

Figure 10: Awareness of lifestyle risk factors (prompted)



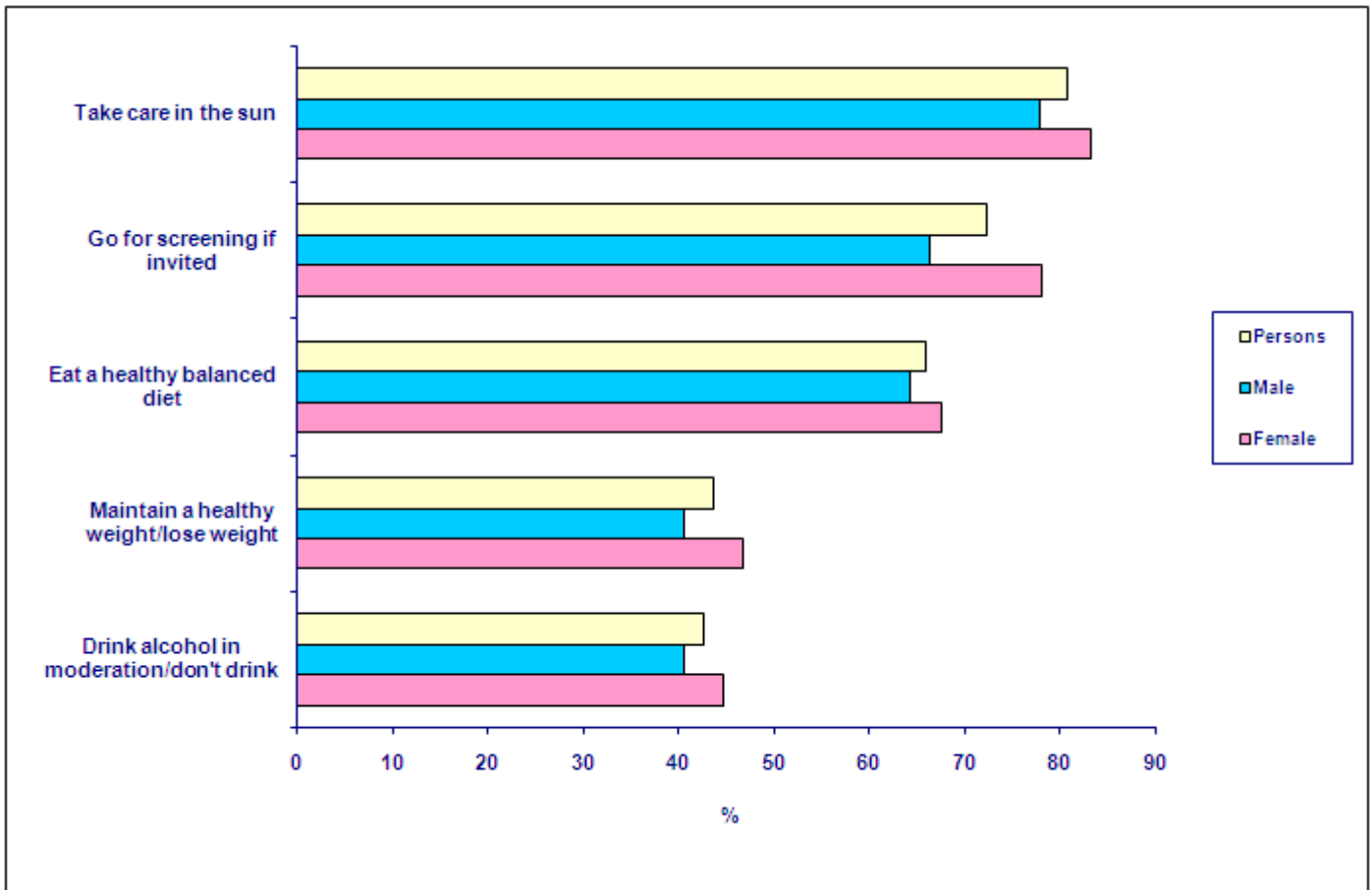
Myths and options mentioned by less than 1% of respondents are not shown.

⁵ See appendix 2 for the complete list of response options for Question 8.

Females were more likely than males to recognise that taking care in the sun (83% vs.78%), attending screening (78% vs. 66%), eating a healthy balanced diet (68% vs. 64%) and maintaining a healthy weight (47% vs.41%) were factors that could reduce cancer risk (see Figure 11, Table 11 in appendix 4).

More males than females believed the “myth” that drinking red wine could reduce the risk of cancer (17% vs.13%), (see Table 11a in appendix 4).

Figure 11: Awareness of lifestyle risk factors (prompted) by gender

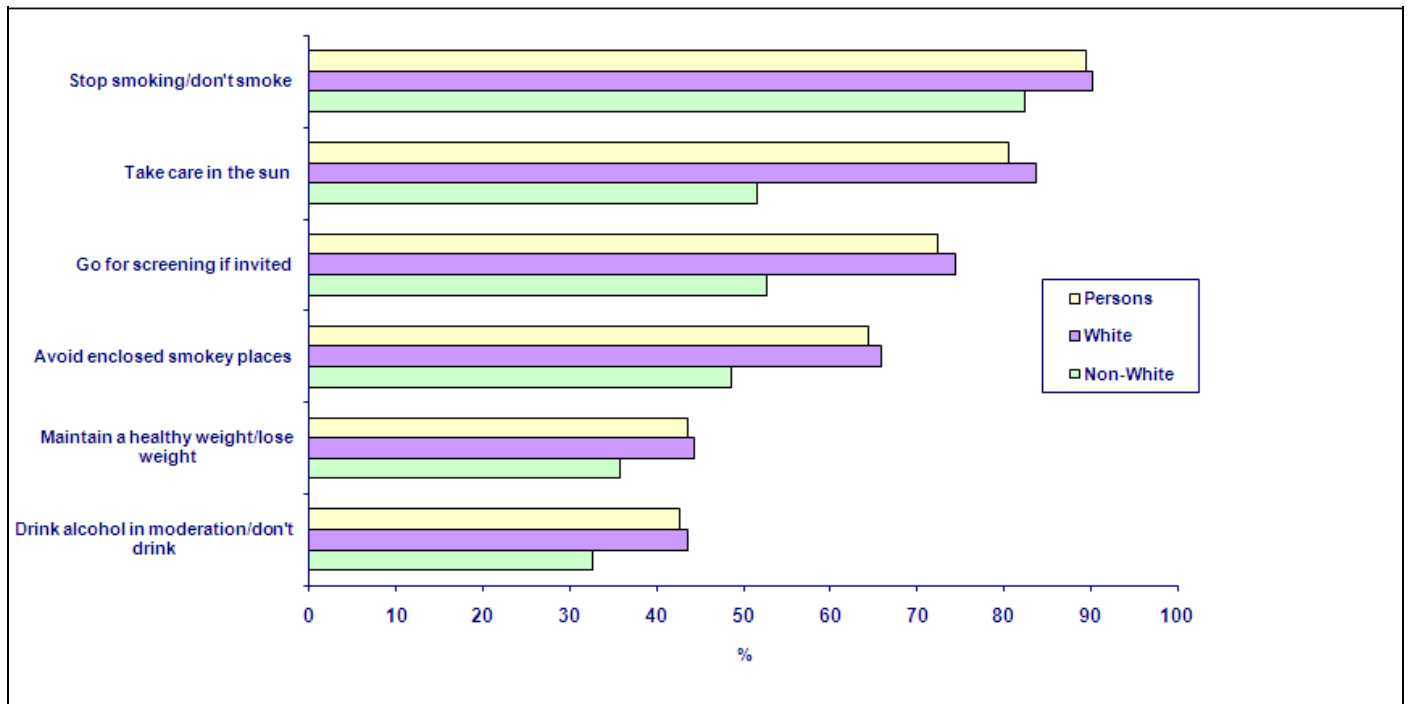


Only options where the responses of males and females were significantly different, and were not myths, are shown in the figure. The 'Don't know' option was not included as it was chosen by less than 1% of respondents.

White respondents were more likely to agree that several of the risk factors presented could increase the chance of cancer. For example, 66% White participants thought that avoiding enclosed smoky places could reduce cancer risk compared with 49% non-White respondents (see Figure 12, Table 12 in appendix 4).

In terms of the myths presented; White participants were more likely than non-White respondents to think that drinking red wine is a protective factor against cancer (15% vs. 10%), yet non-White groups were more likely to believe that eating organic food reduced cancer risk; 22% chose this compared with 11% of White respondents (see Table 12a in appendix 4).

Figure 12: Awareness of lifestyle risk factors (prompted) by ethnicity



Only options where the responses of Whites and non-White participants were significantly different, and were not myths, are shown in the figure. The 'Don't know' option was not included as it was chosen by less than 2% of respondents.

General cancer risk factors

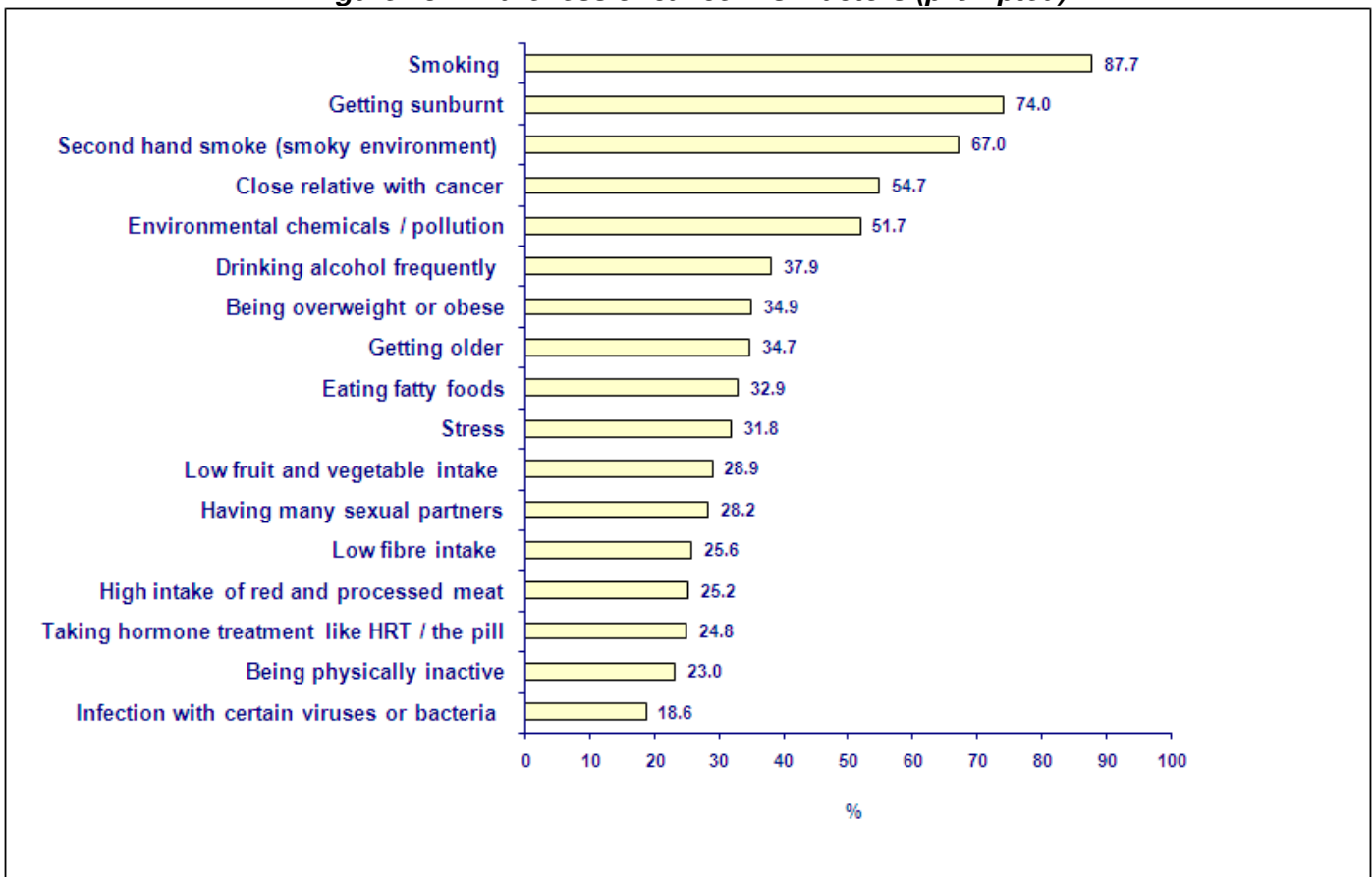
Prompted awareness of cancer risk factors

We asked respondents: ‘Which of these things do you think increase a person’s chance of developing some types of cancer?’ (Question 6 on survey)⁶.

There was good awareness that smoking could increase the risk of cancer with 88% respondents agreeing that this was a danger. Over half respondents thought that: getting sunburnt (74%), being exposed to second hand smoke (67%), having a close relative with cancer (55%) and exposure to environmental chemicals or pollution (52%) could increase a person’s chance of developing cancer. Less well recognised were: taking hormone treatments (like Hormone Replacement Therapy or the birth control pill) (25%), being physically inactive (23%), and infection with certain viruses or bacteria (19%) (see Figure 13, Table 13 in appendix 4).

Some of the options given to respondents were ‘myths’, meaning there is no strong evidence they increase the risk of cancer. These included: ‘living near power lines’, ‘using underarm deodorants’ and ‘using a mobile phone’. A total of 21% of respondents agreed that living near power lines was a risk factor for cancer, 16% thought that using a mobile phone was dangerous and almost 10% of respondents believed that using underarm deodorants could increase a person’s risk (see Table 13a in appendix 4).

Figure 13: Awareness of cancer risk factors (prompted)



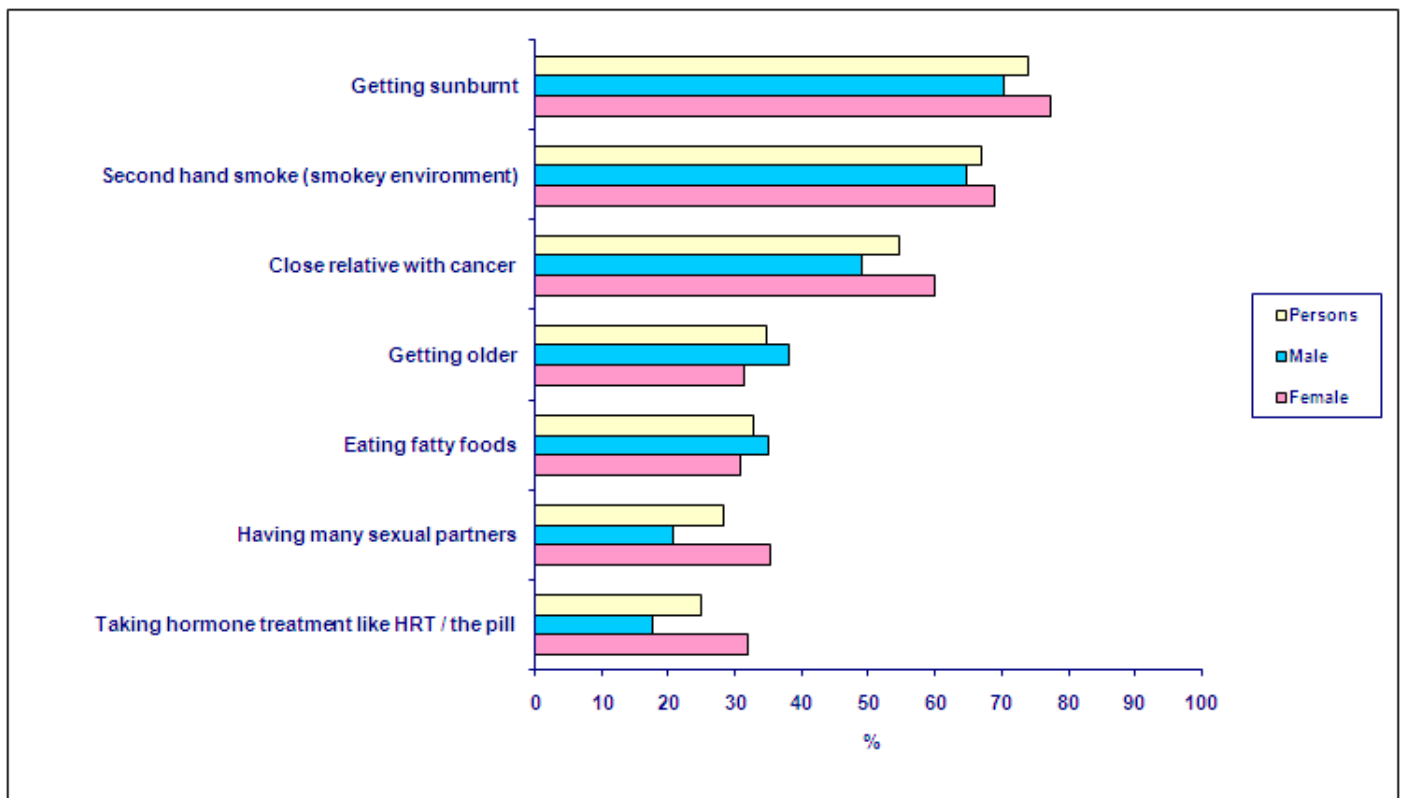
Only options that were not myths are shown in the figure.

⁶ See appendix 2 for the complete list of response options for Question 6.

For nearly all the risk factors presented to respondents, females were more likely to believe they could increase the risk of developing cancer. For example, 78% females thought that getting sunburnt was risky compared with 70% males. There were two exceptions; males were more likely to recognise that older age is a risk factor for developing cancer compared with females (38% vs.31%) and that eating fatty foods may increase a person's chance of developing cancer (35% vs. 31%) (see Figure 14, Table 14 in appendix 4).

Females were also more likely to think living near power lines (24% vs.19%) and using underarm deodorant (12% vs.7%) were dangerous compared with males (see Table 14a in appendix 4) even though there is no strong evidence that these increase the risk of developing cancer.

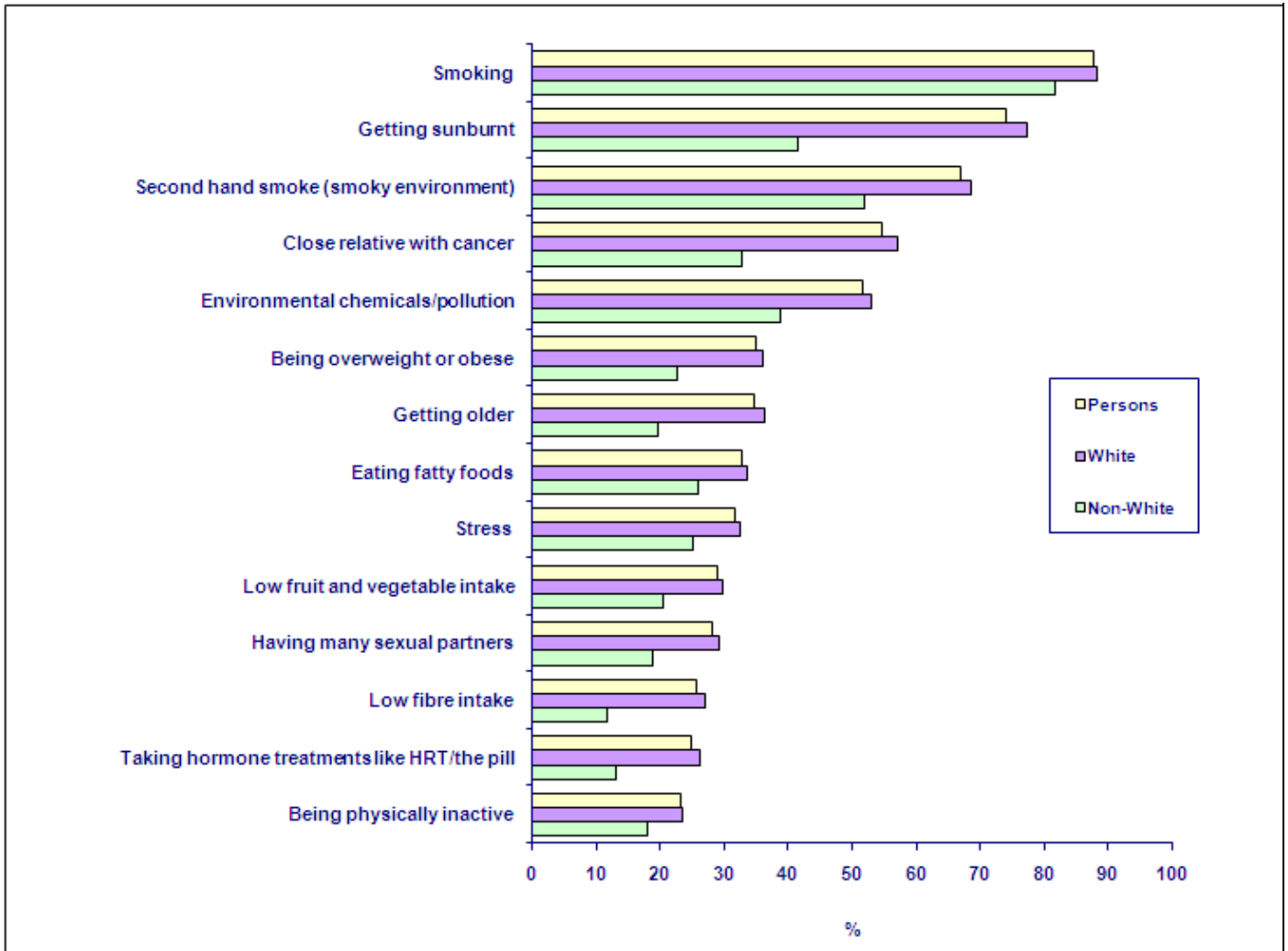
Figure 14: Awareness of cancer risk factors (prompted) by gender



Only options where the responses of males and females were significantly different, and were not myths, are shown in the figure. The 'Don't know' option was not included as it was chosen by less than 2% of respondents.

In general, White participants were more aware of the risk factors for cancer compared with non-White participants. For example, 57% White respondents thought that having a close relative with cancer could increase cancer risk compared with 33% of non-White respondents; and 30% White participants believed that having a diet low in fruit and vegetables could increase risk compared with 20% of non-White participants (see Figure 15, Table 15 in appendix 4).

Figure 15: Awareness of cancer risk factors (prompted) by ethnicity



Only options where the responses of White and non-White participants were significantly different, and were not myths, are shown in the figure. The 'Don't know' option was not included as it was chosen by less than 3% of respondents.

Summary: Awareness of cancer risk factors

Lifestyle cancer risk factors

Unprompted awareness

- Stopping smoking was the most common lifestyle risk factor known about by 66% of respondents, yet only 3% knew about the need to maintain a healthy weight.
- Less than a third of respondents mentioned exercise (29%), 20% said alcohol and 10% knew that taking care in the sun could help reduce cancer risk.
- Females generally showed higher awareness than males, for example, 62% of females mentioned that diet could help reduce cancer risk compared with 57% of males.
- White respondents showed higher levels of awareness than non-White respondents; 67% White participants knew that reducing/stopping smoking and avoiding smoky places could reduce the risk of cancer compared with 52% non-White participants.

Prompted awareness

- Stopping smoking, taking care in the sun and attending cancer screening were well known as factors that could reduce cancer risk (>72%). In contrast, drinking alcohol in moderation (or not drinking) and maintaining a healthy weight were less well recognised (≤45%).
- Awareness of sun exposure was eight times higher (81% vs.10%) when participants were given a prompted list to choose from compared to when they were asked to recall cancer risk factors from memory.
- Females were better at recognising lifestyle risks compared with males; 83% females recognised sun exposure as a risk compared with 78% males.
- White respondents showed higher recognition than non-White respondents, for example 66% White participants recognised that a smoky environment could increase cancer risk compared with 49% non-White participants.

General cancer risk factors

Prompted awareness

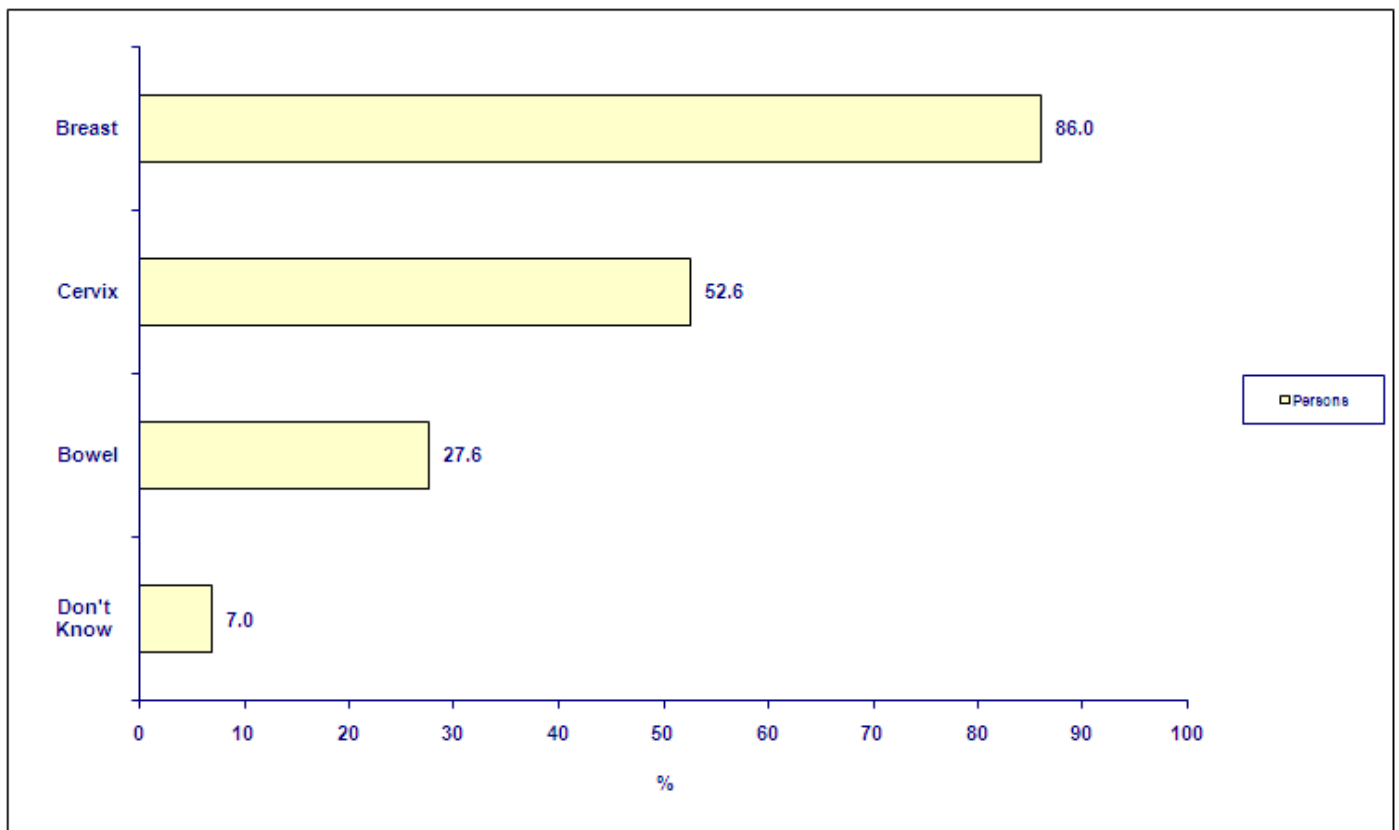
- Awareness of smoking and getting sunburnt as general risk factors for cancer was high (≥74%). In contrast, recognition that taking hormone treatment (like Hormone Replacement Therapy, or the birth control pill), being physically inactive, or getting an infection from certain viruses or bacteria could increase cancer risk was low (≤25%).
- Females were generally more likely to think that the risk factors presented to them (from a list of possible general cancer risk factors) could increase a person's chance of developing cancer compared with males. However this list deliberately included myths which females were also more likely to think were cancer risk factors, such as 'living near power lines' (24% vs.19%) and using underarm deodorant (12% vs. 7%).
- White respondents had higher awareness than non-White groups of several risk factors, for example 57% White respondents correctly thought that having a close relative with cancer could increase cancer risk compared with 33% of non-White respondents

2.4 Awareness of NHS cancer screening programmes

We asked respondents: “What types of cancer can a person be invited to be screened for by the NHS National Screening Programme?” (Question 4 on survey)⁷.

The NHS currently provide three national cancer screening programmes; breast and cervical for females, and bowel for both males and females. Respondents were given these options along with others that are not currently offered by the NHS (e.g. prostate cancer screening).

Figure 16: Awareness of NHS cancer screening programmes



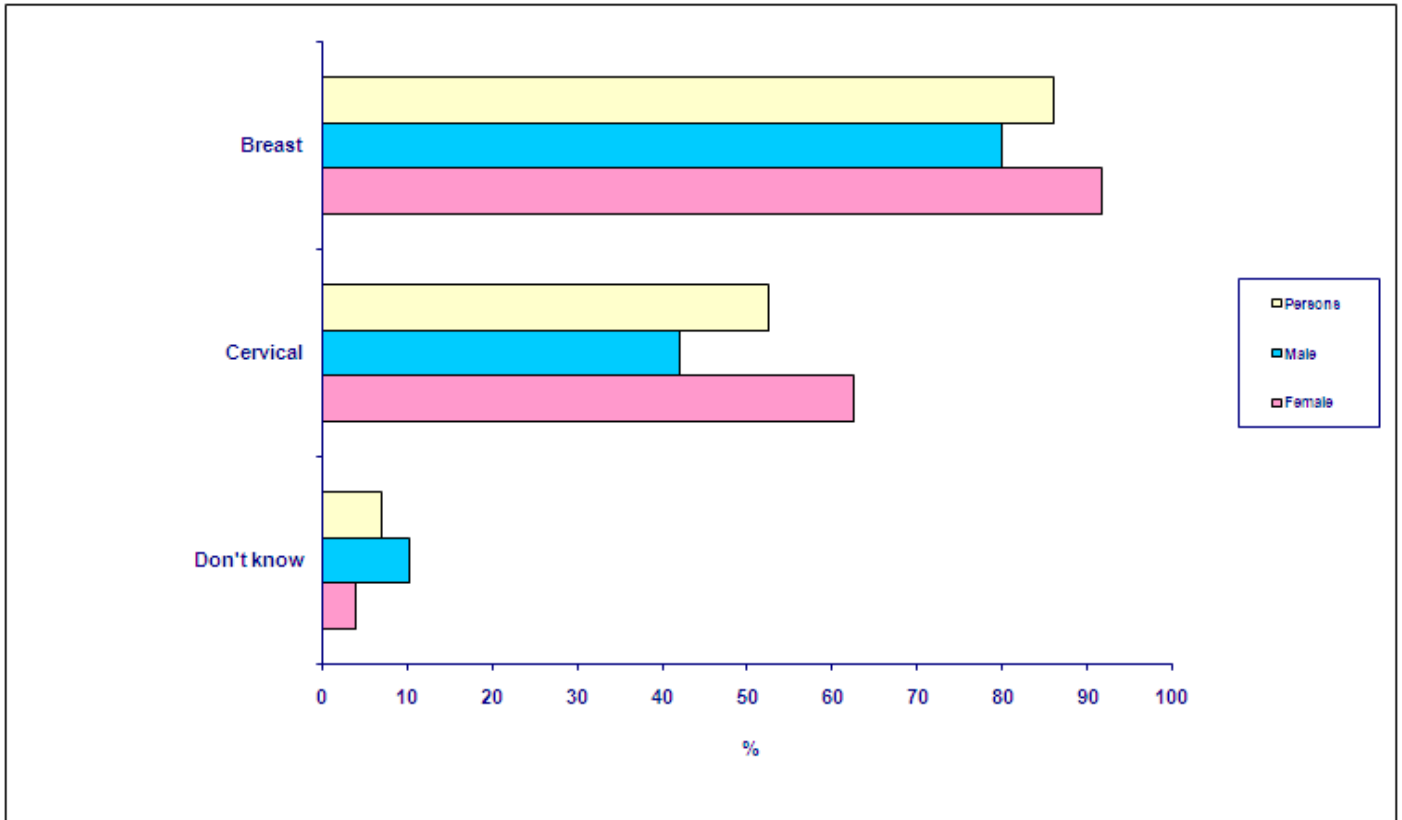
86% of respondents correctly thought that there was a breast cancer screening programme. Over half the participants (53%) were able to correctly identify that cervical cancer screening was offered by the NHS, and 28% correctly identified that there was an NHS bowel cancer screening programme (see Figure 16, Table 16 in appendix 4).

Almost 40% of people mistakenly believed that prostate cancer screening was a national NHS cancer screening programme, while 25% thought there was a lung cancer screening programme, and 21% believed there was a skin cancer screening programme offered by the NHS.

⁷ See appendix 2 for the complete list of response options for Question 4.

Females were more aware of the breast and cervical cancer screening programmes, but there was no difference in awareness of the bowel screening programme (see Figure 17, Table 17 in appendix 4).

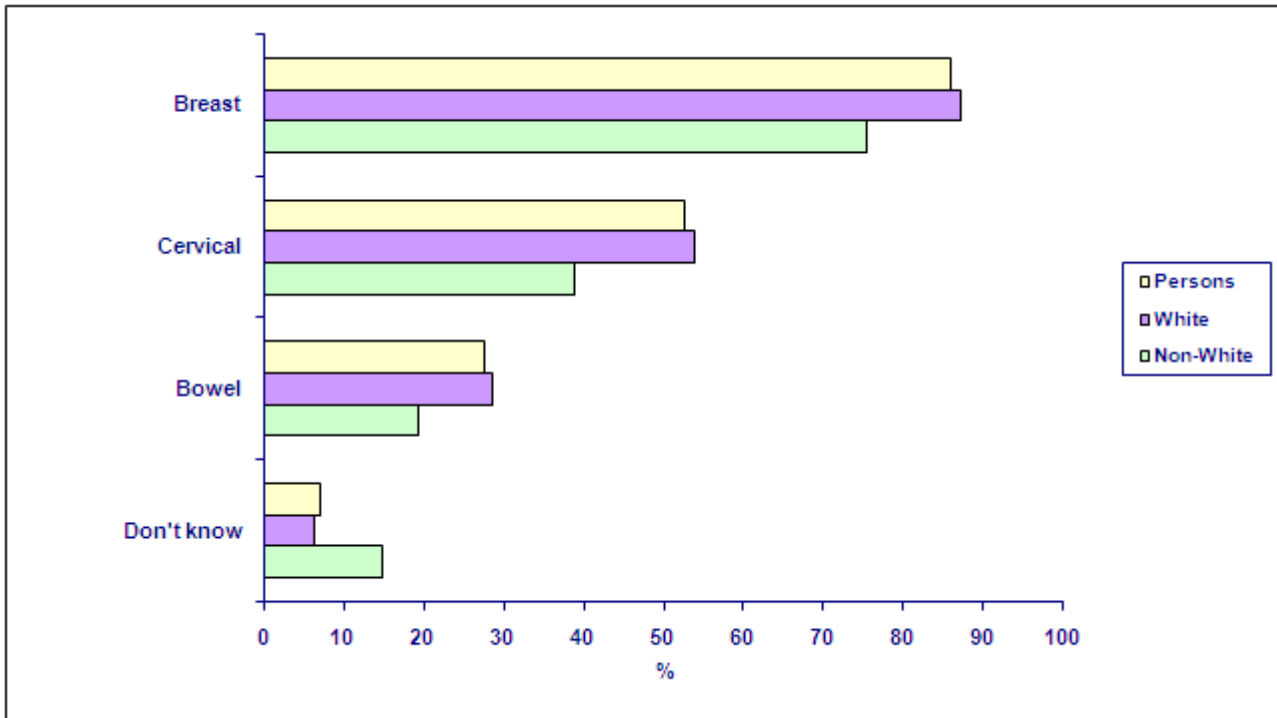
Figure 17: Awareness of NHS cancer screening programmes by gender



Only options where the responses of males and females were significantly different and were 'true' are shown in the graph.

White participants showed higher awareness of all NHS cancer screening programmes compared with non-White groups. For example, 29% of White respondents knew there was a bowel screening programme, compared with 19% of non-White respondents. Also, non-White participants were significantly more likely than White participants to say that they did not know any NHS cancer screening programs (15% vs. 6%) (see Figure 18, Table 18 in appendix 4).

Figure 18: Awareness of NHS cancer screening programmes by ethnicity



Only options where the responses of Whites and non-White participants were significantly different are shown in the figure.

Summary: Awareness of NHS cancer screening programmes

- Awareness of the breast cancer screening programme was higher (86%) than for the cervical (53%) and bowel cancer screening programme (28%).
- Several people mistakenly believed there were prostate (38%) and lung cancer (25%) NHS national screening programmes.
- Females were more aware of the breast and cervical cancer screening programmes compared with males, for example, 92% females were aware of the breast programme compared with 80% males.
- Non-White participants had lower awareness of all NHS cancer screening programmes compared with White respondents, for example 29% of White respondents knew there was a bowel cancer screening programme offered by the NHS compared with 19% of non-White respondents.

2.5 Sun and sunbeds

Frequency of sunburn

We asked respondents: “Thinking back over last summer, did you get sunburnt at all? (Yes, No or Don’t Know)” (Question 10 on survey).

Around 1 in 5 (22%) people admitted to getting sunburnt last summer (0.1% said they didn’t know) (see Table 19, appendix 4). There were no differences in reported sunburn between males and females, but as may be expected, more White participants than non-White participants were sunburnt last summer (24% vs. 6%) (see Tables 19 & 20, appendix 4).

Sunburn: UK or abroad

We asked respondents: “Did you get sunburnt in the UK?” and “Did you get sunburnt abroad?” (Yes, No or Don’t Know) (Question 11 on survey).

Of those who admitted to being sunburnt last summer (22%), more were sunburnt in the UK (56%) than abroad (54%), yet the reverse was true for Non-white groups who were more likely to be sunburnt while abroad than in the UK (76% vs 24%).

Attitude towards sunbeds

We asked respondents: “Please tell me how much you agree or disagree with the following statement: Sunbed tanning is safer than sun tanning” (Question 12 on survey).

The majority of people surveyed (70%) disagreed that sunbed tanning was more safe than sun tanning. Females were more likely to disagree than males (73% vs. 66%). White participants were also more likely to disagree with this statement than non-White participants (72% vs. 51%) (see Tables 25 and 26 in appendix 4).

Summary: Sun and sunbeds

- Around 1 in 5 respondents admitted to being sunburnt in the previous year.
- The majority of people surveyed (70%) disagreed that sunbed tanning was more safe than sun tanning.

3. Discussion

This survey shows that awareness of cancer signs and risk factors varies widely across different symptoms and risk factors as well as according to respondent's gender and ethnic group⁸.

Although awareness that a 'lump' could be a sign of cancer was good (56%), knowledge of other potential cancer symptoms was relatively poor with a quarter of participants mentioning 'skin problems' and less than a quarter recalling any other sign of cancer. There was particularly poor awareness for less 'typical' symptoms such as loss of appetite, hair loss, nausea and swellings. Although participants did much better when asked to choose symptoms from a prompted list, less than half of respondents recognised persistent unexplained pain, change in bowel motions, a cough or croaky voice, irregular vaginal bleeding, a sore that does not heal and difficulty passing urine as potential cancer symptoms.

Recognising a cancer sign or symptom is often the first step in seeking medical help and could help improve rates of early diagnosis. These survey results show that there is significant room for improvement in public awareness of signs and symptoms of cancer.

Stopping smoking was well recalled as a way to reduce cancer risk (66%), yet awareness of exercise, alcohol intake and sun safe behaviour was relatively poor with less than a third of respondents able to recall these lifestyle factors and only 3% mentioning maintaining a healthy weight. Again, although recognition from a prompted list was better than recall from memory, less than half of respondents thought that reducing alcohol intake or maintaining a healthy weight could help to reduce cancer risk.

When respondents were presented with other more general cancer risk factors, not specifically associated with lifestyle, less than a third of participants recognised that infection from viruses or bacteria, taking Hormone treatment (like Hormone Replacement Therapy or the birth control pill), or having several sexual partners could contribute to a higher cancer risk. These findings indicate that there is a lot more work to be done in raising awareness of cancer risk factors across the board, and in particular, the association between weight and cancer and alcohol and cancer. This is vital if we are to meet our 2020 goal that 'more people will know how to reduce their risk of cancer'.

On the whole, knowledge of cancer signs and risk factors was higher in females compared with males. Initiatives designed to reduce this gap should be explored, piloted and evaluated, particularly because recent evidence points to males being at increased risk of cancer compared with females (National Cancer Intelligence Network, Cancer Research UK, The Centre for Men's Health at Leeds Metropolitan University and Men's Health Forum, 2009). There is also a pressing need for awareness raising initiatives that target ethnic minority groups, who generally showed lower awareness of most cancer signs and risk factors and NHS cancer screening programmes. This is particularly important in light of evidence that some ethnic minority groups have a higher rates of certain types of cancer (National Cancer Intelligence Network and Cancer Research UK, 2009) and evidence suggesting that cancer incidence among some ethnic minority groups could be increasing (Smith et al, 2003).

Less than a third of participants knew there was an NHS Bowel Cancer Screening Programme, this could be because it is a relatively new programme in England, Scotland and Wales and has not yet started in

⁸ Differences identified between White and non-White participants should be interpreted cautiously because analyses did not control for social economic background.

Northern Ireland (planned for 2010). Bowel cancer screening offers an excellent opportunity to increase early diagnosis of bowel cancer, but this will require a significant improvement in awareness of the screening programme to ensure that screening is taken up by the public.

Results also highlight the need to increase awareness of the dangers of sun exposure in the UK and ways to reduce the risk of sunburn. Our national skin cancer prevention campaign ('Sunsmart') should help us to make a difference in this area.

The Cancer Reform Strategy (CRS), published by the Department of Health in 2007, emphasised the importance of raising awareness of cancer early warning signs and risk factors in the general population. The strategy has generated a significant amount of work in this area, namely, the National Awareness and Early Diagnosis Initiative (NAEDI), which is a partnership between Cancer Research UK and the Department of Health. NAEDI aims to support and co-ordinate activities that promote earlier diagnosis of cancer and ensure delivery of the CRS. One of the nine NAEDI workstreams; 'measuring public awareness of cancer' led to the development of the Cancer Research UK Cancer Awareness Measure (CAM), which is the first validated tool to assess awareness of cancer signs and risk factors. The CAM was used in two national surveys⁹ and is now being implemented locally across the UK to obtain baseline levels of awareness and to monitor the impact of initiatives designed to improve awareness of cancer. This extensive programme of work should contribute to improvements in awareness of cancer signs and risk factors over time and help us to meet our 2020 goals.

⁹ Results from the both national surveys can be found in the 'CAM baseline report' on the Department of Health website: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_108749

4. References

National Cancer Intelligence Network, Cancer Research UK, The Centre for Men's Health at Leeds Metropolitan University and Men's Health Forum (2009). The Excess Burden of Cancer in Men in the UK. http://info.cancerresearchuk.org/prod_consump/groups/cr_common/@nre/@sta/documents/generalcontent/crukmig_1000ast-2748.pdf

National Cancer Intelligence Network and Cancer Research UK (2009). Cancer Incidence and Survival by Major Ethnic Group, England 2002-2006. http://info.cancerresearchuk.org/prod_consump/groups/cr_common/@nre/@sta/documents/generalcontent/crukmig_1000ast-2749.pdf

Smith, L. K, Botha, J. L, Benghiat, A, Steward, W. P (2003). British Journal of Cancer, 89 (1) 70-73.

The Cancer Reform Strategy (2007)
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/dh_081006

NAEDI: <http://info.cancerresearchuk.org/spotcancerearly/naedi/index.htm>

Office For National Statistics (2001). Population of the United Kingdom by ethnic group. <http://www.statistics.gov.uk/cci/nugget.asp?id=455>

Cancer Research UK 2020 Goals: <http://www.cancerresearchuk.org/aboutus/whoweare/ourgoals>

Appendix 1: Methodology

Survey design

A total sample of 4060 interviews of people aged 15 years and over were carried out across the United Kingdom between 2nd and 15 October 2008. These interviews were carried out by British Market Research Bureau (BMRB) as part of their weekly Face-to-Face Omnibus interviews¹. All interviews are conducted in-home using a Computer Assisted Personal Interviewing (CAPI) system.

The Face-to-Face Omnibus uses a random location sampling technique; a single-stage sample design taking as its sample units a bespoke amalgamation of Output Areas². These Output Areas are grouped into sample units by CACI within ward and taking account of their ACORN characteristics. Sampling units have an average size of 300 households. Men and full time workers are normally interviewed in the evening while non-working women can be interviewed in the afternoon. After completing an interview, the interviewer leaves two houses before attempting the next interview.

The survey is designed to gather the views of a representative sample of the population, with regard to sex, age, and lifestyle. The data is weighted to ensure that the demographic profile of the sample matches that of the adult UK population. A rim weighting technique is used in which target profiles are set for eight separate demographic variables. The weights are based on the UK population distribution of gender, employment and parental status, age, social grade and region of the country. Consequently, each individual has an associated weight determined by their combination of characteristics, and their frequency in the survey compared to the UK population at large.

BMRB Face-to-Face Omnibus - <http://www.bmrb-omnibus.co.uk/> Each week, BMRB Face-to-Face Omnibus interviews a nationally representative sample of 2,000 adults aged 15 years or over across the UK.

Output Areas (OA's) are the fundamental basis for the output of the 2001 census.

Analysis of data

The first question of the survey checked whether interviewees had taken part in a Department of Health face-to-face interview about cancer awareness in September 2008 as this might affect their response to this survey; 113 of the 4060 interviews were abandoned after a positive answer to this question. Thus, a total of 3947 of the interviews were used for analysis.

Note: Q1 and Q9 in the survey have not been included in any data analysis.

Weighted data was used in the calculation of proportions throughout. A standard error formula was provided by BMRB (see below), and is used to generate the table below. A weighting efficiency factor of 0.88 was used to adjust for possible clustering when calculating the confidence interval and testing the significance of any difference between two calculated proportions.

The following formula was used to calculate the confidence intervals in the table below:

$$1.96 * \text{sqrt} ((p*(100-p)/(m*0.88))$$

(Where *p* = the percentage of respondents
and *m* = sample size)

Statistical 95% confidence intervals around calculated percentages
(Source : BMRB)

		Group size											
		100	200	300	400	500	1000	1200	1500	2000	3000	3500	3947
Percentage of respondents	1	±2.1	±1.5	±1.2	±1.0	±0.9	±0.7	±0.6	±0.5	±0.5	±0.4	±0.4	±0.3
	5	±4.6	±3.2	±2.6	±2.3	±2.0	±1.4	±1.3	±1.2	±1.0	±0.8	±0.8	±0.7
	10	±6.3	±4.4	±3.6	±3.1	±2.8	±2.0	±1.8	±1.6	±1.4	±1.1	±1.1	±1.0
	15	±7.5	±5.3	±4.3	±3.7	±3.3	±2.4	±2.2	±1.9	±1.7	±1.4	±1.3	±1.2
	20	±8.4	±5.9	±4.8	±4.2	±3.7	±2.6	±2.4	±2.2	±1.9	±1.5	±1.4	±1.3
	25	±9.0	±6.4	±5.2	±4.5	±4.0	±2.9	±2.6	±2.3	±2.0	±1.7	±1.5	±1.4
	30	±9.6	±6.8	±5.5	±4.8	±4.3	±3.0	±2.8	±2.5	±2.1	±1.7	±1.6	±1.5
	35	±10.0	±7.0	±5.8	±5.0	±4.5	±3.2	±2.9	±2.6	±2.2	±1.8	±1.7	±1.6
	40	±10.2	±7.2	±5.9	±5.1	±4.6	±3.2	±3.0	±2.6	±2.3	±1.9	±1.7	±1.6
	45	±10.4	±7.4	±6.0	±5.2	±4.6	±3.3	±3.0	±2.7	±2.3	±1.9	±1.8	±1.7
	50	±10.4	±7.4	±6.0	±5.2	±4.7	±3.3	±3.0	±2.7	±2.3	±1.9	±1.8	±1.7
	55	±10.4	±7.4	±6.0	±5.2	±4.6	±3.3	±3.0	±2.7	±2.3	±1.9	±1.8	±1.7
	60	±10.2	±7.2	±5.9	±5.1	±4.6	±3.2	±3.0	±2.6	±2.3	±1.9	±1.7	±1.6
	65	±10.0	±7.0	±5.8	±5.0	±4.5	±3.2	±2.9	±2.6	±2.2	±1.8	±1.7	±1.6
	70	±9.6	±6.8	±5.5	±4.8	±4.3	±3.0	±2.8	±2.5	±2.1	±1.7	±1.6	±1.5
	75	±9.0	±6.4	±5.2	±4.5	±4.0	±2.9	±2.6	±2.3	±2.0	±1.7	±1.5	±1.4
80	±8.4	±5.9	±4.8	±4.2	±3.7	±2.6	±2.4	±2.2	±1.9	±1.5	±1.4	±1.3	
85	±7.5	±5.3	±4.3	±3.7	±3.3	±2.4	±2.2	±1.9	±1.7	±1.4	±1.3	±1.2	
90	±6.3	±4.4	±3.6	±3.1	±2.8	±2.0	±1.8	±1.6	±1.4	±1.1	±1.1	±1.0	
95	±4.6	±3.2	±2.6	±2.3	±2.0	±1.4	±1.3	±1.2	±1.0	±0.8	±0.8	±0.7	

The sample sizes used for each group were as follows:

Non-white participants : 400
 Males and females and persons : 2000
 White participants : 3500

Testing for significance

In addition to giving confidence intervals around each of the estimates provided by BMRB, testing of statistical significance was performed by the Statistical Information Team at Cancer Research UK to identify where there were differences between the observations in the different groups i.e. either between the sexes or between the ethnic groups.

The test used to check for statistically significant differences was the **two sample z-test** which is used to compare two subgroups of one random sample.

To demonstrate how the z-test is used the following information is used as an example:

In reply to the question “*Did you get sunburnt last Summer?*”

23.3% of males answered ‘Yes’ (which equates to 446 respondents who answered ‘Yes’ out of a total of 1918 respondents). 21.7% of females answered ‘Yes’ (which equates to 440 respondents who answered Yes out of a total of 2029 respondents).

The method of using the z test to compare these subgroups is explained below.

The formula used was as follows:

For 95% confidence – the value of alpha (α) here is 0.5 so the corresponding critical value from the Z distribution table is 1.96.

Critical value = 1.96

For the purpose of this example r_1 and r_2 will relate to the response above:

Here we will have r_1 = Male proportion who answered ‘Yes’ = 0.233

And r_2 = Female proportion who answered ‘Yes’ = 0.217

$r_1 = 0.233$

$r_2 = 0.217$

$n_1 = 1918$

$n_2 = 2029$

Calculate the standard error:

$$SE = \sqrt{P \cdot Q} \times \sqrt{\frac{(n_1 + n_2)}{(n_1 \cdot n_2)}}$$

Where $P = \frac{(n_1 \cdot r_1) + (n_2 \cdot r_2)}{n_1 + n_2}$ and $Q = 1 - P$

From this the Z statistic is calculated: $Z = \frac{r_1 - r_2}{SE}$

If Z > Critical Value (here 1.96) then there is a Statistically Significant Difference

Using the example above to calculate the standard error:

Firstly calculate $P = \frac{(1918 \cdot 0.233) + (2029 \cdot 0.217)}{1918 + 2029} \approx 0.225$ **P = 0.23**

$Q = 1 - P$ so $Q = 1 - 0.23 \approx 0.77$ **Q = 0.77**

Standard Error = $\sqrt{0.23 \cdot 0.77} \cdot \sqrt{\frac{1918 + 2029}{1918 \cdot 2029}} \approx$ **0.0134**

To calculate Z: $\frac{0.23 - 0.22}{0.0134} \approx 0.7463 \approx 0.75$

As 0.75 < 1.96 so this implies that there is no statistically significant difference between the responses of males and females for this particular example.

Appendix 2: Questionnaire

For the purposes of this report, the survey questions 1, 7, 9 and 13 have been omitted.

1. Can I just check, have you taken part in another face to face interview about Cancer awareness since the beginning of September? This survey was for the Department of Health.

Yes	1
No	2
Don't Know	Y

2. Can you name any sign or symptoms that could be an indication of cancer?

Don't Know	Y
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3. What do you think are the main changes that people can make to their lifestyle to reduce the risk of developing some types of cancer? Please mention all that come to mind.

INTERVIEWER: PROBE: "What else?", "and what else?" UNTIL RESPONDENT SAYS NOTHING ELSE.

Don't Know	Y
------------	---

4. What types of cancer can a person be invited to be screened for by the NHS National Screening Programme?

Breast	1
Cervix	2
Lung	3
Prostate	4
Bowel	5
Pancreas	6
Skin	7
Brain	8
Don't Know	Y
None of these	X

5. Which of the following do you think could be early signs of cancer? You may choose as many answers as you like.

A new or unusual lump or swelling	1
A sore that will not heal	2
Hair loss	3
A change in a mole	4
Blood in your urine or bowel motions	5
Unexplained weight gain	6
A cough, croaky voice or difficulty swallowing	7
A change to looser or more frequent bowel motions	8
High temperature/Fever	9
Difficulty passing urine	10
Unexplained weight loss	11
Bleeding from the vagina after the menopause or between periods	12
Unexplained pain lasting longer than 4 weeks	13
Don't Know	Y
None of these	X

6. Which of these things do you think increase a person's chance of developing some types of cancer?

Getting older	1
Stress	2
Close relative with cancer	3
Smoking	4
Low fruit and vegetable intake	5
Being overweight or obese	6
Taking hormone treatments like HRT/ the pill	7
Drinking alcohol frequently	8
Infection with certain viruses or bacteria	9
Being physically inactive	10
Having many sexual partners	11
Using underarm deodorants	12
Getting sunburnt	13
Living near power lines	14
Eating fatty foods	15
Environmental chemicals/ pollution	16
Low fibre intake	17
High intake of red and processed meat	18
Using a mobile phone	19
Second hand smoke (smoky environment)	20
Don't Know	Y
None of these	X

7. Which of these is the most likely to increase a person's chance of developing cancer?

Getting older	1
Stress	2
Close relative with cancer	3
Smoking	4
Low fruit and vegetable intake	5
Being overweight or obese	6
Taking hormone treatments like HRT/ the pill	7
Drinking alcohol frequently	8
Infection with certain viruses or bacteria	9
Being physically inactive	10
Having many sexual partners	11
Using underarm deodorants	12
Getting sunburnt	13
Living near power lines	14
Eating fatty foods	15
Environmental chemicals/ pollution	6
Low fibre intake	7
High intake of red and processed meat	8
Using a mobile phone	9
Second hand smoke (smoky environment)	10
Don't Know	Y

This question is repeated for the following loop values:

- first
- second
- third
- fourth
- fifth

A total of 5 iterations

8. Which of these things can people do to reduce the risk of developing some types of cancer?

Stop smoking/don't smoke	1
Eat a healthy balanced diet	2
Take care in the sun	3
Take regular exercise	4
Go for screening if invited	5
Drink alcohol in moderation/don't drink	6
Avoid chemicals/environmental pollution	7
Maintain a healthy weight/lose weight	8
Take vitamin supplements	9
Eat organic food	10
Drink red wine	11
Avoid mobile phones	12
Avoid enclosed smoky places	13
There is nothing I can do	14
Don't Know	Y
None of these	X

9. Which of the following best describes your smoking habits?

Never smoked	1
Ex smoker	2
Social smoker	3
Regular smoker	4
Don't Know	Y
Refused	Z

10. Thinking back over the last summer, did you get sunburnt at all?

Yes	1
No	2
Don't Know	Y

IF 10 = Yes

11. Did you get sunburnt ...?

Yes	1
No	2
Don't Know	Y

This question is repeated for the following loop values:

- in the UK
- abroad

A total of 2 iterations

12. Please tell me how much you agree or disagree with the following statement:

"Sunbed tanning is safer than sun tanning"

Strongly agree	1
Slightly agree	2
Neither agree nor disagree	3
Slightly disagree	4
Strongly disagree	5
Don't Know	Y

13. Do you recall seeing any information about the health risks associated with the sunbeds in the past year? If so, which of the following places did you see it?

Newspaper articles	1
Magazine articles	2
TV	3
Website	4
Leaflet	5
Poster	6
Sunbed salon	7
Other	8
No, I haven't seen any information about the health risks associated with sunbeds	9
Don't Know	Y

Appendix 3: Survey questions used in the report

For the purposes of this report, the survey questions 1, 7, 9 and 13 have been omitted. The following information describes the survey questions and responses that were used in the report.

Q2. Can you name any signs or symptoms that could be an indication of cancer?

From the answers given by participants in response to this question, a total of 103 categories of responses were generated.

From a selection of these 103 options, a further 4 categories were derived. These were included any mention of:

1. Skin problems
2. Bowel, urinary or genital problems
3. Moles
4. Lumps

Findings by gender

Of the total 103 options available for selection (including 'None' and 'Don't Know'), 15 showed significant differences between the sexes. These 15 were:

- **Lump in breast** * - chosen by significantly more females
- **Lumps (no detail)*** - chosen by significantly more females
- **Growths** - chosen by significantly more males
- **Change in mole*** - chosen by significantly more females
- **Change in skin*** - chosen by significantly more females
- **Bleeding from bowel/back passage/blood in stools*** - chosen by significantly more Females
- **Bleeding (no detail)*** - chosen by significantly more females
- **Change in bowel movements*** - chosen by significantly more females
- **Bruising** - chosen by significantly more females
- **Discharge** - chosen by significantly more females
- **(Sudden/dramatic) weight loss** - chosen by significantly more females
- **(Bad/severe) headaches/migraines** - chosen by significantly more females
- **Changes in general health/body** - chosen by significantly more females
- **None** - chosen by significantly more males
- **Don't Know** - chosen by significantly more males

7 of these have been incorporated into the 4 categorised of signs/symptoms of cancer (*).

Findings by ethnicity

Of the total 103 options available for selection (including 'None' and 'Don't Know'), 13 showed significant differences between the ethnic groups. These 13 were:

- **Lumps (no detail)*** - chosen by significantly more White participants
- **Change in mole*** - chosen by significantly more White participants
- **Blood in urine*** - chosen by significantly more White participants
- **Bleeding from bowel/back passage/blood in stools*** - chosen by significantly more White participants
- **Passing blood*** - chosen by significantly more White participants
- **Bleeding (no detail)*** - chosen by significantly more White participants
- **Fever (high) temperature** - chosen by significantly more non-White participants
- **(Sudden/dramatic) weight loss** - chosen by significantly more White participants
- **Hair loss** - chosen by significantly more non-White participants
- **(Bad/severe) headaches/migraines** - chosen by significantly more White participants
- **Feeling unwell / general ill health** - chosen by significantly more White participants
- **None** - chosen by significantly more White participants
- **Don't Know** - chosen by significantly more non-White participants

6 of these have been incorporated into the 4 categorised of signs/symptoms of cancer (*).

Q3. What do you think are the main changes that people can make to their lifestyle to reduce the risk of developing some types of cancer? Please mention all that come to mind

From the answers given by participants in response to this question, a total of 84 categories of responses were generated.

From a selection of these 84 options, a further 6 categories were derived.

These were:

1. Any mention of smoking
2. Any mention of food
3. Exercise
4. Any mention of alcohol
5. Any mention of sun
6. Any mention of weight

Findings by gender

Of the total 87 options available for selection (including *None/Nothing* and *Don't Know*), 6 showed significant differences between the sexes. These 6 were:

- ***Don't drink / Stop alcohol**** - chosen by significantly more female participants
- ***Be aware of your body/self examination*** - chosen by significantly more female participants
- ***Regular check-ups/medicals*** - chosen by significantly more female participants
- ***(Do not use) Sun beds**** - chosen by significantly more female participants
- ***Reduce/avoid exposure to carcinogenic agents/chemicals/radiation*** - chosen by significantly more male participants
- ***Healthy eating**** - chosen by significantly more female participants

3 of these have been incorporated into the 6 categorised of signs/symptoms of cancer (*).

Findings by ethnicity

Of the total 87 options available for selection (including *None/Nothing* and *Don't Know*), 12 showed significant differences between the ethnic groups. These 12 were:

- ***Reduce alcohol**** - chosen by significantly more White participants
- ***Drink alcohol in moderation**** - chosen by significantly more White participants
- ***Stay out of the sun**** - chosen by significantly more White participants
- ***Give up smoking**** - chosen by significantly more White participants
- ***Don't smoke**** - chosen by significantly more White participants
- ***Stop smoking**** - chosen by significantly more White participants
- ***Healthy diet**** - chosen by significantly more White participants
- ***Diet (no detail)**** - chosen by significantly more White participants
- ***Lose weight**** - chosen by significantly more White participants
- ***Eat well/properly*** - chosen by significantly more White participants
- ***None/nothing*** - chosen by significantly more White participants
- ***Don't know**** - chosen by significantly more Non-white participants

10 of these have been incorporated into the 6 categorised of signs/symptoms of cancer (*).

In Q3 the response category titled: Reduce/avoid exposure to carcinogenic agents/chemicals/ radiation has been re-named as 'Avoid harmful substances'.



Q4. What types of cancer can a person be invited to be screened for by the NHS National Screening Programme?

Q5. Which of the following do you think could be early signs of cancer? You may choose as many answers as you like.

Q6. Which of these things do you think increase a person's chance of developing some types of cancer?

Q7. Which of these is the most likely to increase a person's chance of developing cancer?

Q8. Which of these things can people do to reduce the risk of developing some types of cancer?

Q10. Thinking back over last summer, did you get sunburnt at all?

Q11. Did you get sunburnt in the UK or abroad?

Q12. Please tell me how much you agree or disagree with the following statement: "Sunbed tanning is safer than sun tanning."

Appendix 4: Tables

Question 2 on survey: “Can you name any signs or symptoms that could be an indication of cancer?”

Table 1: Awareness of cancer signs and symptoms (unprompted)

Sign /symptom	% Persons	95% CI¹⁰ ±
Lumps	56.0%	2.3%
Skin Problems	24.7%	2.0%
Bowel , urinary or genital problems	19.4%	1.9%
Sudden or dramatic weight loss	18.7%	1.9%
Moles	17.2%	1.7%
Tiredness	10.9%	1.4%
Pain	10.7%	1.4%
(Bad) cough	4.9%	1.0%
Headaches	4.2%	1.0%
Feeling unwell or general ill health	3.9%	1.0%
Breathing Problems	3.7%	1.0%
Swellings	3.3%	1.0%
Nausea	3.3%	1.0%
Hair Loss	3.1%	1.0%
Loss of Appetite	3.1%	1.0%
Don't Know / None	14.2%	1.7%



Table 2: Awareness of cancer signs and symptoms (unprompted) by gender

Sign /symptom	Males		Females	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Lumps	44.7%	2.3%	66.7%	2.2%
Skin problems	22.7%	2.0%	26.7%	2.0%
Bowel, urinary or genital problems	16.2%	1.7%	22.4%	1.9%
Sudden or dramatic weight loss	15.8%	1.7%	21.6%	1.9%
Tiredness/fatigue/lethargy/loss of energy	9.4%	1.4%	12.2%	1.4%
Pain (no detail)	9.3%	1.4%	12.0%	1.4%
Headaches	2.7%	1.0%	5.6%	1.0%
Loss of appetite	2.5%	1.0%	3.6%	1.0%
Hair Loss	3.9%	1.0%	2.3%	0.5%
Growths	3.1%	1.0%	1.0%	0.5%
Feeling unwell/general ill health	3.1%	1.0%	4.5%	1.0%
Don't Know / None	18.6%	1.9%	10.1%	1.4%

**All confidence intervals are 95% confidence intervals, and are presented as being +/- X%. For example in Table 2 above, 44.7% of male participants gave the answer 'Lumps' and the 95% confidence interval for this 44.7% of Males is 2.3%. This means that if we were to carry out this survey 100 times, 95 times out of 100 the percentage of Males that would choose 'Lumps' as an option would fall between 42.4% and 47.0% i.e. 44.7% plus or minus 2.3%. The '95% confidence interval' here is the interval between 42.4% and 47.0%.

Table 3: Awareness of cancer signs and symptoms (unprompted) by ethnicity

Sign /symptom	White		Non-white	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Lumps	58.1%	1.7%	36.0%	5.0%
Skin Problems	25.7%	1.5%	16.3%	3.7%
Bowel, urinary or genital problems	20.6%	1.4%	8.3%	3.1%
Sudden or dramatic weight loss	19.7%	1.4%	10.0%	3.1%
Moles	18.0%	1.4%	9.3%	3.1%
Headaches	4.4%	0.8%	2.0%	1.0%
Feeling unwell or general ill health	4.1%	0.8%	1.4%	1.0%
Hair loss	2.7%	0.8%	6.6%	2.3%
Don't Know / None	12.7%	1.3%	28.1%	4.8%

Question 5 on survey: “Which of the following do you think could be early signs of cancer? You may choose as many answers as you like”.

Table 4: Awareness of cancer signs and symptoms (prompted)

Sign /symptom	% Persons	95% CI ¹ ±
A new or unusual lump or swelling	82.9%	1.7%
A change in a mole	78.3%	1.9%
Blood in your urine or bowel motions	66.0%	2.2%
Unexplained weight loss	64.6%	2.2%
Unexplained pain lasting longer than 4 weeks	47.0%	2.3%
A change to looser or more frequent bowel motions	46.1%	2.3%
A cough, croaky voice or difficulty swallowing	44.9%	2.3%
Bleeding from the vagina after the menopause or between periods	44.8%	2.3%
A sore that will not heal	42.8%	2.3%
Difficulty passing urine	41.3%	2.3%
Hair Loss	21.8%	1.9%
Unexplained weight gain	18.3%	1.9%
High Temperature / Fever	9.9%	1.4%
Don't Know	2.2%	0.5%

Table 5: Awareness of cancer signs and symptoms (prompted) by gender

Sign /symptom	Males		Females	
	%	95% CI ¹ ±	%	95% CI ¹ ±
A new or unusual lump or swelling	80.8%	1.9%	84.9%	1.7%
A change in a mole	74.6%	2.0%	81.8%	1.9%
Blood in your urine or bowel motions	62.5%	2.2%	69.4%	2.1%
Unexplained weight loss	59.9%	2.3%	69.0%	2.1%
Difficulty passing urine	44.1%	2.3%	38.6%	2.3%
A cough, croaky voice or difficulty swallowing	39.9%	2.3%	49.7%	2.3%
A change to looser or more frequent bowel motions	39.1%	2.3%	52.7%	2.3%
A sore that will not heal	40.7%	2.3%	44.8%	2.3%
Bleeding from the vagina after the menopause or between periods	32.9%	2.2%	56.1%	2.3%
Don't Know	2.5%	1.0%	1.8%	0.5%

Table 6: Awareness of cancer signs and symptoms (prompted) by ethnicity

Sign/symptom	White		Non-white	
	%	95% CI ¹ ±	%	95% CI ¹ ±
A new or unusual lump or swelling	85.0%	1.3%	62.7%	5.0%
A change in a mole	81.9%	1.4%	44.9%	5.2%
Blood in your urine or bowel motions	68.5%	1.6%	42.0%	5.1%
Unexplained weight loss	66.4%	1.7%	47.0%	5.2%
Unexplained pain lasting longer than 4 weeks	48.8%	1.8%	29.8%	4.8%
A change to looser or more frequent bowel motions	48.5%	1.8%	23.6%	4.5%
Bleeding from the vagina after the menopause or between periods	46.7%	1.8%	26.2%	4.5%
A cough, croaky voice or difficulty swallowing	46.4%	1.8%	30.7%	4.8%
A sore that will not heal	44.2%	1.8%	30.2%	4.8%
Difficulty passing urine	42.9%	1.8%	25.8%	4.5%
Hair Loss	20.7%	1.4%	31.8%	4.8%
High temperature / fever	9.4%	1.1%	14.1%	3.7%
Don't Know	1.8%	0.4%	6.1%	2.3%

Question 3 on survey: “What do you think are the main changes that people can make to their lifestyle to reduce the risk of developing some types of cancer? Please mention all that come to mind”.

Table 7: Awareness of lifestyle risk factors (unprompted)

Lifestyle risk factor	% Persons	95% CI ¹ ±
Smoking	65.9%	2.2%
Food	59.2%	2.3%
Exercise	29.3%	2.1%
Alcohol	19.8%	1.9%
Sun	10.3%	1.4%
Check ups	7.4%	1.0%
Healthy Lifestyle	6.3%	1.0%
Avoid Stress	3.8%	1.0%
Weight	3.4%	1.0%
Avoid harmful substances	3.3%	1.0%
Self examination	2.8%	1.0%
None / nothing	2.2%	0.5%
Don't Know	5.1%	1.0%

Table 8: Awareness of lifestyle risk factors (unprompted) by gender

Lifestyle risk factor	Males		Females	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Food	56.5%	2.3%	61.6%	2.3%
Exercise	27.2%	2.0%	31.4%	2.1%
Alcohol	17.5%	1.9%	22.0%	1.9%
Sun	11.7%	1.4%	8.9%	1.4%
Regular check ups/medicals	5.1%	1.0%	9.6%	1.4%
Avoid harmful substances	5.0%	1.0%	1.7%	0.5%
Weight	2.5%	1.0%	4.3%	1.0%
Self examination	1.5%	0.5%	4.0%	1.0%
None / nothing	2.3%	0.5%	2.0%	0.5%
Don't Know	5.8%	1.0%	4.4%	1.0%

Table 9: Awareness of lifestyle risk factors (unprompted) by ethnicity

Lifestyle risk factor	White		non-White	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Smoking	67.4%	1.7%	51.5%	5.2%
Food	60.2%	1.7%	50.1%	5.2%
Alcohol	20.3%	1.4%	14.5%	3.7%
Sun	10.6%	1.1%	6.8%	2.3%
Weight	3.7%	0.8%	0.8%	1.0%
Don't Know	4.3%	0.8%	12.0%	3.1%
None/Nothing	2.3%	0.4%	0.8%	1.0%

Question 8 on survey: “Which of these things can people do to reduce the risk of developing some types of cancer?”

Table 10: Awareness of lifestyle risk factors (prompted)

Lifestyle risk factors	% Persons	95% CI ¹ ±
Stop smoking / don't smoke	89.4%	1.4%
Take care in the sun	80.6%	1.9%
Go for screening if invited	72.3%	2.1%
Eat a healthy balanced diet	65.8%	2.2%
Avoid enclosed smoky places	64.3%	2.2%
Take regular exercise	51.0%	2.3%
Avoid chemicals / environmental pollution	45.0%	2.3%
Maintain a healthy weight / lose weight	43.7%	2.3%
Drink alcohol in moderation / don't drink	42.6%	2.3%
There's nothing I can do	1.6%	0.5%

Table 10A: Awareness of lifestyle risk factors (prompted): Myths

Myths	% Persons	95% CI ¹ ±
Drink red wine	14.9%	1.7%
Eat organic food	12.2%	1.4%
Avoid mobile phones	10.3%	1.4%
Take vitamin supplements	9.2%	1.4%

Table 11: Awareness of lifestyle risk factors (prompted) by gender

Lifestyle risk factors	Males		Females	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Take care in the sun	77.9%	1.9%	83.2%	1.7%
Go for screening if invited	66.2%	2.2%	78.1%	1.9%
Eat a healthy balanced diet	64.2%	2.2%	67.5%	2.1%
Maintain a healthy weight / lose weight	40.5%	2.3%	46.8%	2.3%
Drink alcohol in moderation/don't drink	40.5%	2.3%	44.6%	2.3%

Table 11A: Awareness of lifestyle risk factors (prompted) by gender: Myths

Myths	Males		Females	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Drink red wine	17.0%	1.7%	13.0%	1.7%

Table 12: Awareness of lifestyle risk factors (prompted) by ethnicity

Lifestyle risk factors	White		non-White	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Stop smoking / don't smoke	90.2%	1.1%	82.4%	4.2%
Take care in the sun	83.7%	1.3%	51.6%	5.2%
Go for screening if invited	74.4%	1.5%	52.7%	5.2%
Avoid enclosed smoky places	66.0%	1.7%	48.6%	5.2%
Maintain a healthy weight / lose weight	44.4%	1.8%	35.8%	5.0%
Drink alcohol in moderation / don't drink	43.6%	1.8%	32.7%	5.0%

Table 12A: Awareness of lifestyle risk factors (prompted) by ethnicity: Myths

Lifestyle risk factors	White		non-White	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Drink red wine	15.4%	1.3%	10.1%	3.1%
Eat organic food	11.2%	1.1%	21.6%	4.2%

Question 6 on survey: “Which of these things do you think increase a person’s chance of developing some types of cancer?”

Table 13: Awareness of cancer risk factors (prompted)

Risk Factors	% Persons	95% CI¹ ±
Smoking	87.7%	1.4%
Getting sunburnt	74.0%	2.0%
Second hand smoke (smoky environment)	67.0%	2.2%
Close relative with cancer	54.7%	2.3%
Environmental chemicals / pollution	51.7%	2.3%
Drinking alcohol frequently	37.9%	2.3%
Being overweight or obese	34.9%	2.2%
Getting older	34.7%	2.2%
Eating fatty foods	32.9%	2.2%
Stress	31.8%	2.1%
Low fruit and vegetable intake	28.9%	2.1%
Having many sexual partners	28.2%	2.1%
Low fibre intake	25.6%	2.0%
High intake of red and processed meat	25.2%	2.0%
Taking hormone treatment like HRT / the pill	24.8%	2.0%
Being physically inactive	23.0%	2.0%
Infection with certain viruses or bacteria	18.6%	1.9%

Table 13A: Awareness of cancer risk factors (prompted): Myths

Risk Factors	% Persons	95% CI¹ ±
Living near power lines	21.0%	1.9%
Using underarm deodorant	9.3%	1.4%
Using a mobile phone	16.4%	1.7%



Table 14: Awareness of cancer risk factors (prompted) by gender

Risk Factors	Males		% Females	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Getting sunburnt	70.4%	2.1%	77.5%	1.9%
Second hand smoke (smoky environment)	64.8%	2.2%	69.0%	2.1%
Close relative with cancer	49.1%	2.3%	60.0%	2.3%
Getting older	38.1%	2.3%	31.4%	2.1%
Eating fatty foods	35.1%	2.2%	30.7%	2.1%
Having many sexual partners	20.6%	1.9%	35.3%	2.2%
Taking hormone treatment like HRT/the pill	17.5%	1.9%	31.8%	2.1%

Table 14A: Awareness of cancer risk factors (prompted) by gender (myths)

Risk Factors	Males		% Females	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Living near power lines	18.5%	1.9%	23.5%	2.0%
Using underarm deodorant	6.5%	1.0%	12.0%	1.4%

Table 15: Awareness of cancer risk factors (prompted) by ethnicity

Risk Factors	White		non-White	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Smoking	88.3%	1.1%	81.6%	4.2%
Getting sunburnt	77.5%	1.4%	41.6%	5.1%
Second hand smoke (smoky environment)	68.5%	1.6%	52.0%	5.2%
Close relative with cancer	57.0%	1.8%	32.8%	5.0%
Environmental chemicals/pollution	53.1%	1.8%	38.9%	5.1%
Getting older	36.3%	1.7%	19.7%	4.2%
Being overweight or obese	36.1%	1.7%	22.6%	4.5%
Eating fatty foods	33.6%	1.7%	26.0%	4.5%
Stress	32.5%	1.7%	25.1%	4.5%
Low fruit and vegetable intake	29.7%	1.6%	20.4%	4.2%
Having many sexual partners	29.2%	1.6%	18.7%	4.2%
Low fibre intake	27.1%	1.5%	11.8%	3.1%
Taking hormone treatments like HRT/the pill	26.1%	1.5%	13.0%	3.7%
Being physically inactive	23.6%	1.5%	18.0%	4.2%
Don't Know	1.38%	0.4%	1.36%	1.0%

Question 4 on survey: “What types of cancer can a person be invited to be screened for by the NHS National Screening Program?”

Table 16: Awareness of NHS cancer screening programmes by persons

NHS cancer screening programmes	% Persons	95% CI ±
Breast	86.0%	1.7%
Cervical	52.6%	2.3%
Bowel	27.6%	2.1%
Don't Know	7.0%	1.0%

Table 17: Awareness of NHS cancer screening programmes by persons and gender

NHS cancer screening programmes	% Persons	95% CI ±	Males		Females	
			%	95% CI ¹ ±	%	95% CI ¹ ±
Breast	86.1%	1.7%	80.0%	1.9%	91.8%	1.4%
Cervical	52.6%	2.3%	42.0%	2.3%	62.6%	2.2%
Bowel	27.6%	2.1%	28.4%	2.1%	26.9%	2.0%
Don't Know	7.0%	1.0%	10.3%	1.4%	3.9%	1.0%

Table 18: Awareness of NHS cancer screening programmes by ethnicity

	White		non-White	
	%	95% CI ¹ ±	%	95% CI ¹ ±
Breast	87.2%	1.3%	75.4%	4.5%
Cervical	54.0%	1.8%	38.8%	5.1%
Bowel	28.5%	1.6%	19.3%	4.2%
Don't Know	6.2%	0.8%	14.8%	3.7%

Question 10 on survey: “Thinking back over last summer, did you get sunburnt at all?”

Table 19: Frequency of sunburn by persons and gender

	% Persons	95% CI ¹ ±	Males		Females	
			%	95% CI ¹ ±	%	95% CI ¹ ±
Yes	22.4%	1.9%	23.3%	2.0%	21.7%	1.9%
No	77.5%	1.9%	76.6%	2.0%	78.3%	1.9%
Don't Know	0.1%	0.5%	0.2%	0.5%	0.02%	0.5%

Table 20: Frequency of sunburn by ethnicity

	% White	95% CI ¹ ±	% non-White	95% CI ¹ ±
Yes	24.2%	1.5%	6.3%	2.3%
No	75.7%	1.5%	93.7%	2.3%
Don't Know	0.1%	0.4%	0.0%	-

Question 11 on survey: “Did you get sunburnt in the UK or abroad?”

Table 21: Sunburn in the UK by persons and gender

	% Persons	95% CI ¹ ±	Males		Females	
			%	95% CI ¹	%	95% CI ¹ ±
Yes	12.5%	1.7%	12.5%	1.7%	12.4%	1.4%
No	10%	1.4%	10.8%	1.4%	9.3%	1.4%

Table 22: Sunburn in the UK by ethnicity

	% White	95% CI ¹ ±	% non-White	95% CI ¹ ±
Yes	13.7%	1.3%	1.5%	1.0%
No	10.5%	1.1%	4.8%	2.3%

Table 23: Sunburn abroad by persons and gender

	% Persons	95% CI ±	Males		Females	
			%	95% CI ¹ ±	%	95% CI ¹ ±
Yes	12.2%	1.4%	13.0%	1.7%	11.3%	1.4%
No	10.3%	1.4%	10.2%	1.4%	10.3%	1.4%

Table 24: Sunburn abroad by ethnicity

	% White	95% CI ¹ ±	% non-White	95% CI ¹ ±
Yes	13.0%	1.3%	4.8%	2.3%
No	11.3%	1.1%	1.5%	1.0%

Question 12 on survey: “Please tell me how much you agree or disagree with the following statement: Sunbed tanning is safer than sun tanning?”

Table 25: Attitudes to sunbeds by persons and gender

	% Persons	95% CI ¹ ±	Males		Females	
			%	95% CI ¹ ±	%	95% CI ¹ ±
Agree	8.2%	1.4%	9.1%	1.4%	7.5%	1.4%
Neither agree nor disagree	20.4%	1.9%	22.9%	2.0%	18.1%	1.9%
Disagree	69.5%	2.1%	65.9%	2.2%	72.9%	2.0%
Don't know	1.8%	0.5%	2.2%	0.5%	1.5%	0.5%

Table 26: Attitudes to sunbeds by ethnicity

	% White	95% CI ¹ ±	% non-White	95% CI ¹ ±
Agree	7.8%	1.1%	13.0%	3.7%
Neither agree nor disagree	19.1%	1.4%	32.5%	5.0%
Disagree	71.5%	1.6%	51.3%	5.2%
Don't know	1.6%	0.4%	3.3%	2.3%

Appendix 5: Response categories

Two of the survey questions included in the report were 'open' (unprompted). The following information describes how responses to these questions were categorised for analyses.

Q2. Can you name any signs or symptoms that could be an indication of cancer?

Categorised Groups

'SKIN PROBLEMS'

Melanoma
Bleeding mole
Abnormal Mole
Change in mole
Mole(s) (no detail)
Sores/sores that won't heal
Rash
Blemishes/spots/marks/pigmentation/patches
Tightening of skin/dimples/puckering
Yellow skin
Change in skin colour/discolouration of skin/loss of skin colour
Sunburn
Itchy/irritated skin
Change in skin
Skin problems

MENTION BOWEL URINARY OR TOILET PROBLEMS

Bleeding from vagina
Blood in urine
Bleeding from bowel/back passage/blood in stools
Passing blood
Bleeding (no detail)
Frequency/need to pass urine often
Difficulty passing urine
Prostate problems
Urine/bladder problems (all other references)
Change in bowel movements
Constipation
Diarrhoea
Blockage

Bowel problems
Toilet problems (no detail)
Change in bodily functions
Changes in toilet habits

MENTION MOLES

Melanoma
Bleeding mole
Abnormal Mole
Change in mole
Mole(s) (no detail)

MENTION LUMPS

Lump in breast
Lump in testicle
Lump in armpit
Lump in prostate
Lump (all other specific references)
Lumps (no detail)

Q3. What do you think are the main changes that people can make to their lifestyle to reduce the risk of developing some types of cancer? Please mention all that come to mind

Categorised Groups

ANY MENTION OF SMOKING

Smoking (no detail)
Give up smoking
Reduce smoking
Don't smoke
Stop smoking
Avoid passive smoking/avoid smoky places

ANY MENTION OF ALCOHOL

Reduce alcohol
Don't drink/Stop alcohol
Drink alcohol in moderation
Drink/Alcohol (no detail)
Stop drinking

ANY MENTION OF SUN

Avoid getting sun burnt
Protection (in the sun)
Sun block/Sunscreen (all references)
Reduce exposure to sunlight
Stay out of the sun
Do not sunbathe
(Do not use) Sun beds
Take care in the sun
Sun (no detail)

ANY MENTION OF FOOD

5 A Day
Fibre
Reduce salt/sugar
Avoid/don't eat (red) meat
Don't eat fatty foods
Don't eat junk food/takeaways
Eat organic/natural food
Eat fresh fruit/veg
Eat fresh food
Eat more fish/fish oil
Eat less fat/Low fat diet
Control what you eat/do no overeat (all references)
Healthy eating
Healthy food
Food (no detail)
Healthy diet
Balanced diet
Diet (no detail)
Change diet/lifestyle
Cut down on dairy products
Eat well/eat properly
Eat tomatoes
(Avoid) certain foods
Don't eat processed/pre-packed foods
Additives (all references)

ANY MENTION OF WEIGHT

Do not be overweight
Lose weight