EUROPE AGAINST CANCER

COMMISSION
OF THE
EUROPEAN COMMUNITIES

EUROPEANS AND CANCER PREVENTION :

a study of attitudes and behaviour of the public

JUNE 1988

V/2106/88

DIRECTORATE-GENERAL FOR EMPLOYMENT, SOCIAL AFFAIRS AND EDUCATION

Actions for a Citizen's Europe in the Field of Public Health

rue de la Loi, 200 B-1049 BRUSSELS

This study was run in the 12 countries of the Community, at the request of the Commission of the European Communities, as part of the Europe against Cancer programme.

An identical questionnaire of some 30 questions was given, as a supplement to Euro-barometer No 27, to representative samples of the populations of the 12 Member States of the Community. A total of 11 651 subjects were interviewed in their own homes, personally, by professional investigators.

The survey was carried out by 12 specialized institutes belonging to the European Omnibus Survey, under the general coordination of Faits et Opinions (Paris). The names of the institutes involved in the research, together with the other technical data, are set out in the annex.

This report was produced by Hélène Riffault and Jean-François Tchernia (Faits et Opinions), with advice from Jacques-René Rabier. As is usual with research of this kind, neither the wording of the questions, the results presented nor the comments upon them are the responsibility of the Commission of the European Communities.

April 1988

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INTRODUCTION

In 1986, The European Community launched its "Europe against Cancer" programme, mainly dealing with preventing this disease and, therefore, with information and health education for the public*.

This first survey of Europeans in the 12 countries of the Community was run to shed light on schemes already being or scheduled to be carried out**.

Three main areas were covered by a questionnaire of some 30 questions***.

The first of these, which is dealt with in Chapter 1, is Europeans and their health. The idea is to get a better grasp of the relations between the citizens of each of the Member States and their health - i.e. both the general problem of health in the society in which they live and their own, personal or family health problems.

The second area, dealt with in Chapter 2, focuses on cancer and cancer prevention. It looks at the importance to European society of cancer-related problems and particularly at the levels of understanding and the opinions, attitudes and behaviour in respect of the European Code against Cancer devised by well-known cancer specialists.

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* See Official Journal of the European Communities, C50, 25 February 1987.

** The initial results of the survey were presented in a working document in early October 1987.

*** See Annex III.

Lastly, the third area, dealt with in Chapter 3, covers the tobacco problem, which it looks at from two angles - tobacco consumption and the smoker's environment and opinions on some of the measures used in the anti-smoking campaign.

This survey, which was carried out simultaneously in the 12 countries of the European Community, is the first of its kind. It is therefore exploratory and some points (especially eating habits, alcohol consumption and screening processes) will have to be the subject of more thorough investigation later on.

Both the people who initiated the survey and those who worked on it hope that these results will enlighten and guide the action of the public institutions and private organizations involved in running the Europe against Cancer programme.

CHAPTER 1

EUROPEANS AND THEIR HEALTH

1.1. ASSESSING THE STATE OF HEALTH

This question had to be put in a survey whose prime aim was cancer prevention so that it would then be possible to analyse the answers on all the other aspects of attitudes to health.

Question: How would you describe your state of health in general now? Would you say it is... (SHOW CARD):
1. Very good
2. Good
3. Reasonable
4. Rather poor
5. Very poor
0. ?*

Almost two thirds of Europeans, on average, think their present state of health is very good (21%) or good (44%) and only 6% that it is rather poor (5%) or very poor (1%). The others claim their health is reasonable (28%) or, in a tiny percentage of cases (1%), fail to answer at all.

So the vast majority of our subjects say they are in good health - which, since such opinions are certainly influenced by the cultural standards of the environment and the psycho-social characteristics of the individual, may mean their state of health is actually fairly good or that they have a fairly optimistic assessment of it.

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* The same question was put in 1981 in an international survey of the value systems of Europeans in nine of the present 12 Member States of the Community. On this subject, see, in particular, Jean Stoetzel's "Les Européens: comment ils évaluent leur état de santé" in Demographie et Sociologie (a collection of papers in honour of Alain Gérard), Publications de la Sorbonne, Paris 1985, pp 109-119.

A first look at the results shows noticeable differences in the answers of the populations in each of the 12 countries. As the previous research had shown, people in northern Europe (Denmark and Ireland) are more likely to say they are in good health than people from the south, where Portugal is in 12th and last place - 49% of Danes and 39% of Irish say they are in very good health, as against only 4% of Portuguese (see table 1.1.).

Easier comparison of national answers was ensured by giving an index to each possible reply, giving weightings of 5, 4, 3, 2, and 1 to the percentages corresponding to "very good", "good", "reasonable", "rather poor" and "very poor" and leaving out the don't knows.

The resulting classification is illustrated by graph No 1.1. The values of the index are all above the central point in the distribution of answers, which is 3, corresponding to "reasonable" health. The scores obtained by the Danes and the Irish are well above the European average of 3.81*. The Portuguese score is by far the lowest and the other countries are somewhere between the two extremes, either side of the European average (see graph 1.1. overleaf).

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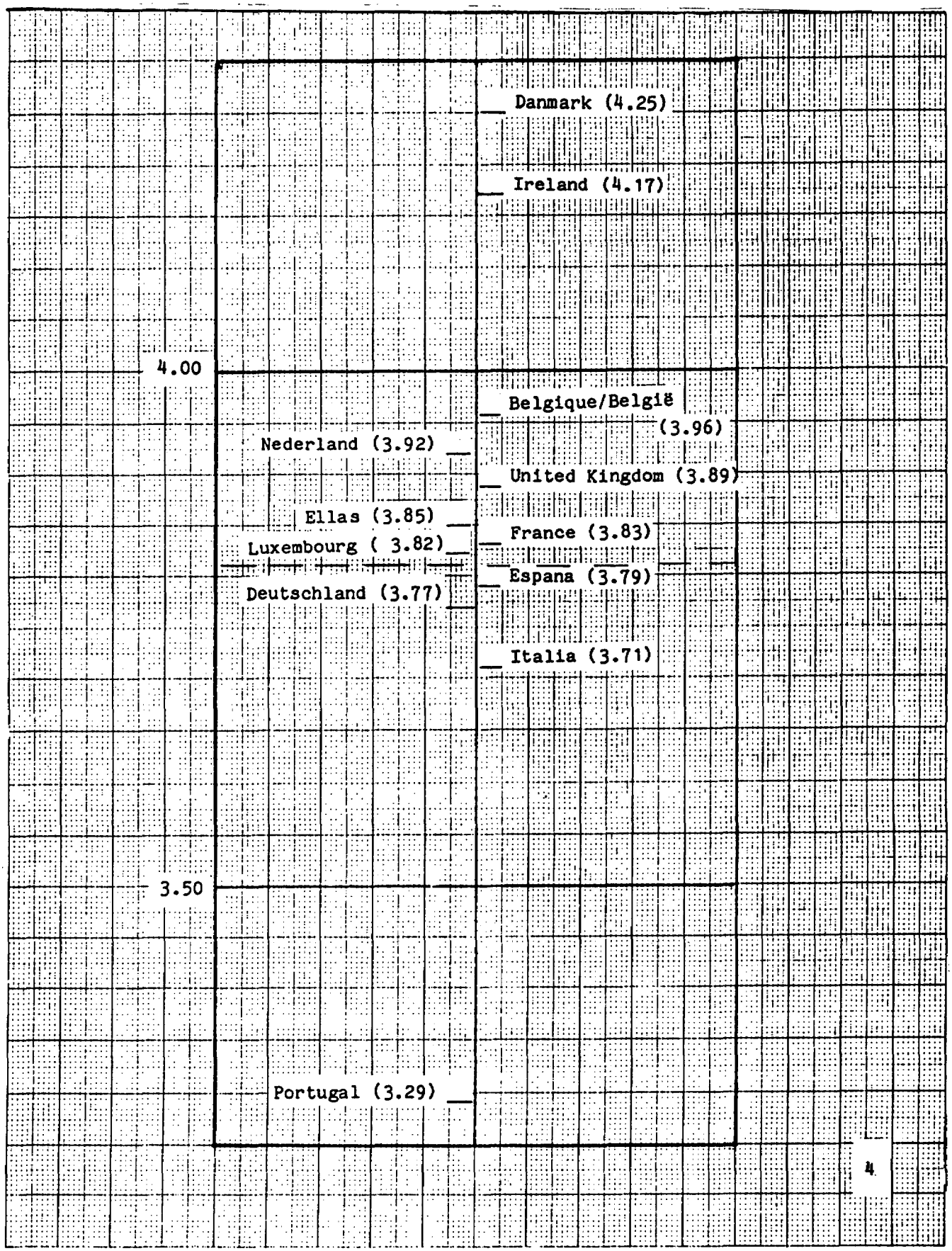
* This is the average weighted to reflect the importance of the corpus (15 and over) in each country.

GRAPH 1.1.

The 12 countries of the European Community by score on the state of healh assessment index



These differences - which are statistically important at least as far as the extreme positions go - are surprising but not unexpected if the one or two previous pieces of research available are borne in mind*. Even Germany's position in relation to the other countries of northern Europe had emerged before - it was in the last place, which it shared with Spain, in the 1981 survey and second from bottom, just before Italy, in a 1977 survey run by the Statistical Office of the European Communities**. And it was in the same position again in 1976 with its answer to a similar question on satisfaction with its state of health (Euro-barometer)***.

Trying to find a once-and-for-all explanation for these differences is outside our scope, particularly since the determining factors may well be different, or of differing intensity, in the different countries.

It would be reasonable to think, first of all, that demographic, health and economic factors come into play here. Countries with bigger percentages of old people, in fact, tend to say their state of health is less good, but this is a question of the percentage of people in the 45-64 age group and women especially. On the other hand, there is a (weaker) positive correlation between the stated health and the percentage of the national population in the 65+ bracket - either these "survivors" really do have better health or they have adapted to their condition as older people.

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* Cf Stoetzel op.cit., p.109.

** "Report on an experimental qualitative survey in eight member countries of the European Community", SOEC/B1/4003/81. Since the survey was an exploratory one, this report was not published. However, there are analyses on the subject which concerns us here in Earl E.Davis, Margaret Fine-Davis and Geraldine Meehan: "Demographic Determinants of Well-being in Eight European Countries", Social indicators Research 10 (1982), pp 341-358.

*** See "The perception of poverty in Europe", a study run as part of the first European anti-poverty campaign, Commission of the European Communities, Brussels, March 1977, p.46.

A country's health situation also has something to do with the inhabitants' subjective assessment of their state of health. There is, for example, a strong negative correlation between these assessments and the infant death rate.

Lastly, the level of economic development, roughly measured by GDP, also affects - although to a lesser extent than the previous variables - the subjective assessment of the state of health (see Table 1.2.).

TABLE 1.1.

How Europeans see their state of health

Question: How would you describe your state of health in general now? Would you say it is... (SHOW CARD) very good, good, reasonable, rather poor, very poor or you don't know?

	Very good	Good	Reasonable	Rather poor	Very poor	?	Total	Index*
WHOLE COMMUNITY **	21	44	28	5	1	1	100	3.81
COUNTRY								
Belgique	27	45	22	4	-	2	100	3.96
Danmark	49	30	17	3	1	-	100	4.25
Deutschland	16	50	27	4	1	2	100	3.77
Ellas (Grèce)	27	41	24	7	1	-	100	3.85
Espana	21	46	25	6	2	-	100	3.79
France	24	43	25	7	1	-	100	3.83
Ireland	39	40	19	2	-	-	100	4.17
Italia	16	44	36	4	-	-	100	3.71
Luxembourg	22	40	35	2	-	1	100	3.82
Nederland	22	51	22	3	1	1	100	3.92
Portugal	4	40	39	12	3	2	100	3.29
United Kingdom	28	37	30	4	1	-	100	3.89

* Very good = 5 - Very poor = 1. Don't knows not included.

** Weighted average.

TABLE 1.2

Correlations at European level between the subjective assessment of the state of health and various objective variables

Proportion of people in the 45-64 age bracket*	
Men	-.344
Women	-.459
Proportion of people over 65+*	
Men	.316
Women	.133
Infant death rate**	-.627
Per capita GDP***	.368

* Eurostat, "Demographic statistics", 1986, pp. 74-75.
**Eurostat, "Demographic statistics", 1986, pp.72-73.
*** Eurostat, "Demographic statistics", 1987, data for 1985.

We have so far looked at each country's answers to the question on the state of health and at the determinants which seem to help form these opinions at national level. But there is no doubt that each subject's reply is also influenced by his/her own personality, his/her situation in society and, of course, his/her actual state of health - i.e. his/her experience (or fear of) sickness.

An examination of the individual data indeed shows that older people, particularly women, the low-income group and people who say they have had a serious illness, are much less positive about their state of health than the younger people, especially men, those in the high-income group and those who have never been ill* **.

These various variables are of course inter-correlated. Older people are more likely to be women than men and they are more likely to have fewer financial resources. And, because of their age, they have experienced more illness.

Age, subject to further research, seems to be the most decisive variable when it comes to the individual evaluating his state of health. But the sex variable has its effect, independent of age, because, in all age brackets, women have a less good opinion of their state of health than men do.

This phenomenon is observed in almost all the countries under scrutiny here, but to varying degrees. It is in countries with the lowest scores on the health assessment index where the gap between men and women tends to be the greatest - as it is in Portugal, for example. In Ireland, however, women tend to have a better opinion of their state of health than men do (see Table 1.3).

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* See definition of incomes in annex.

** The survey included a question on any serious illnesses the subjects had had.

The deterioration in the subjective state of health with age is easily explained. Any biological system tends to old age and death. Indisposition, accidents and disease usually increase with old age, and there is often isolation and a feeling of powerlessness too, but the fear of ageing no doubt precedes the critical age, since the phenomenon occurs very early in the life cycle.

TABLE 1.3.

Health assessment index by country, sex and age* **

	MEN								WOMEN								
	15-19 yrs	20-29 yrs	30-39 yrs	40-49 yrs	50-59 yrs	60-69 yrs	70 yrs +	All men	15-19 yrs	20-29 yrs	30-39 yrs	40-49 yrs	50-59 yrs	60-69 yrs	70 yrs +	All women	All men & women
WHOLE COMMUNITY ***	4.29	4.08	3.98	3.87	3.87	3.57	3.62	3.85	4.04	4.00	3.97	3.86	3.51	3.42	3.28	3.76	3.81
Danmark	4.57	4.50	4.65	4.27	4.25	3.89	3.75	4.33	4.50	4.49	4.33	4.17	3.96	4.01	3.60	4.17	4.25
Ireland	4.46	4.35	4.18	4.14	3.85	3.76	3.84	4.13	4.71	4.27	4.41	4.11	4.08	3.96	3.77	4.20	4.17
Belgique	4.26	4.14	4.11	4.05	3.70	3.98	3.80	4.01	4.33	4.07	3.94	3.82	3.85	3.73	3.50	3.92	3.96
Nederland	4.16	4.21	3.98	3.99	3.39	3.78	3.82	3.93	3.77	4.13	4.12	3.86	3.82	3.69	3.46	3.91	3.92
United Kingdom	4.06	4.04	4.07	3.90	3.62	3.88	3.50	3.88	3.90	3.92	4.18	4.09	3.65	3.46	3.57	3.89	3.89
Ellas	4.52	4.35	4.05	4.03	3.75	3.50	3.22	3.96	4.38	4.19	4.01	3.87	3.50	3.12	3.00	3.74	3.85
France	4.48	4.25	4.03	3.99	3.58	3.66	3.43	3.90	4.40	3.85	3.96	3.97	3.41	3.58	3.01	3.77	3.83
Luxembourg ****	4.29	4.09	4.07	4.00	3.63	3.31	3.45	3.86	3.93	4.13	3.96	3.96	3.48	3.27	3.30	3.79	3.82
Espana	4.48	3.97	3.96	3.76	3.64	3.43	3.28	3.83	3.96	4.06	3.92	3.85	3.62	3.42	3.24	3.75	3.79
Deutschland	4.32	4.01	3.87	3.83	3.37	3.68	3.01	3.80	3.95	4.25	4.02	3.80	3.42	3.43	3.41	3.74	3.77
Italia	4.24	4.00	3.91	3.82	3.68	3.40	3.32	3.79	3.98	3.95	3.65	3.67	3.45	3.22	3.05	3.62	3.71
Portugal	3.83	3.71	3.64	3.36	3.17	2.86	2.65	3.40	3.76	3.56	3.53	3.25	2.82	2.78	2.33	3.20	3.29

* Index calculated on the basis of "very good" = 5 down to "very poor" = 1, with the don't knows excluded. So there central point is therefore 3.00, corresponding to "reasonable". Scores relating to 30 or less people are given in brackets.

** The countries are given in decreasing order of average national scores (men + women).

*** Weighted average.

****Figure given for information (only 300 cases in Luxembourg).

1.2. BEHAVIOUR TOWARDS HEALTH

Europeans' attitudes and behaviour towards cancer, cancer prevention and the cancer information campaigns are inseparable from their attitudes and behaviour towards health in general. After looking at people's assessment of their state of health, and before moving on to the questions on cancer itself, we should perhaps take a closer look at two types of behaviour towards health:

- an interest in health as a topic of general interest;
- habits which make for cancer prevention.

1.2. Interest in health information

Question: Are you interested in programmes on television or radio about health, or articles in the newspaper about health? If YES, do you listen to, watch or read such articles or programmes...

	Whole Community
1. Often	41%
2. Sometimes	39%
3. Rarely	12%
4. Never	7%
0. ?	1%
TOTAL	100%

The Europeans' interest in information about health is clear - eight out of 10 say they tune into radio and television programmes or read articles in the press on health problems "sometimes" or "often". Although the result is not really a surprise in that the subject is one which affects everyone individually, it is nonetheless a massive one, only varying slightly from one country and socio-demographic group to another.

There is less interest in Belgium, Denmark, Ireland and Portugal, but more than seven out of eight still keep up with health information there. The Dutch seem to be the most interested (see Table 1.4.).

TABLE 1.4.

Interest in health information

Question: Are you interested in programmes on television or radio about health, or articles in the newspaper about health?

		Often	Sometimes	Rarely	Never	?	TOTAL
WHOLE COMMUNITY		41	39	12	7	1	100
Country	Belgique	35	36	17	10	2	100
	Danmark	37	38	13	10	2	100
	Deutschland	35	43	16	5	1	100
	Ellas (Grèce)	44	34	16	5	1	100
	Espana	47	35	11	6	1	100
	France	47	36	10	7	-	100
	Ireland	35	39	16	9	1	100
	Italia	39	41	11	9	-	100
	Luxembourg	45	37	15	3	-	100
	Nederland	57	30	8	5	-	100
	Portugal	24	49	14	9	4	100
	United Kingdom	38	40	12	9	1	100
Sex :	Male	34	40	15	10	1	100
	Female	46	39	10	5	-	100
Age :	15-24	30	42	16	11	1	100
	25-39	41	41	12	5	1	100
	40-54	43	37	12	7	1	100
	55 & over	45	37	11	6	1	100
Level of education*							
	Low	41	38	12	8	1	100
	Average	39	39	14	7	1	100
	High	41	41	12	6	-	100
Household income*							
	Low - -	40	38	13	8	1	100
	-	41	40	14	5	-	100
	+	42	40	11	7	-	100
	High + +	41	40	12	7	-	100
Opinion Leadership*							
	Strong + +	50	36	10	4	-	100
	+	42	41	12	5	-	100
	-	40	40	13	7	-	100
	Weak - -	34	37	14	13	2	100

* See definition of these variables in annex.

Interest in health information seems to be fairly closely tied up with individual characteristics (sex and age) and with the degree of opinion leadership*. It has little to do with indicators of social conditions (such as level of education and income) and is, for this reason, clearly different from assessment of the state of health.

Generally speaking, women take a greater interest than men in health. The interest in health information is also related to the degree of leadership. It is in fact usual to find that the higher this is, the better the individual fits into society (and the more exposed he/she is to the media) and the more positive his/her response will be to any question relating to information of any kind.

Lastly, note that the interest in health information is virtually independent of the individual assessment of the state of health covered in the previous chapter. So if a public information campaign is to be properly designed and run, a distinction must be made between the arguments aimed at people who are worried about their health and those aimed at people who are interested in health issues in general - and they are not necessarily the same. Even if they are, amongst women, for example, the motivation is probably different (see Table 1.5.).

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* This is the ability of respondents to take a regular interest in relatively complex, obscure or abstract problems. See the definition in the annex.

TABLE 1.5.

**Interest in health information,
by sex and by assessment of the state of health
(% of subjects saying they "sometimes" or "often"
listen to broadcasts or read articles in the press on health)**

	Men	Women	Total
Assessment of the state of health			
. Very good	70%	83%	77%
. Good	73%	84%	79%
. Reasonable	78%	87%	83%
. Rather poor or very poor	73%	87%	81%
TOTAL	74%	85%	80%

Example: Of the men who think their state of health is very good, 70% take an interest in health information (medical programmes on radio and television and articles in the press).

1.2.2. Habits

Question: Do you ever happen to carry out any of the following things?

	Often	Some-times	Rarely	Never	Abstain	Total
. Cut down your consumption of alcoholic drinks	24	19	11	15	31*	100
. Eat fresh vegetables	66	24	6	3	1	100
. Eat fresh fruits	73	18	5	3	1	100
. Eat food rich in fibre	35	25	17	22	1	100
. Eat non-fatty foods	38	35	17	9	1	100
. Watch your weight	34	24	15	26	1	100
. Avoid intense or prolonged exposure to the sun	33	21	16	28	2	100

The various types of behaviour covered in this question are generally recognized by experts as playing an important part in cancer prevention. So it is the "often" answer which interests us the most. Of course, it would not be wise to assume that this response reflects the actual behaviour of the respondent, although it does at least tell us about the value attributed to the norm.

Eating habits seem to be the most commonly recognized. However, it is still important to stress that a third of Europeans say they do not eat fresh vegetables often and that more than six out of 10 seem to pay very little attention to their fat intake.

The replies on alcohol intake are even greater cause for concern - even if the 29% who claim not to drink and are therefore not concerned with the question as formulated are added to the 24% who claim to cut down often (but from what level?).

Weight watching and avoidance of intense or prolonged exposure to the sun are even less common.

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* The alcohol problem will be dealt with in greater depth in subsequent research.

The various types of behaviour are practised to unequal levels in the different countries. But, before looking at the national variations, there is an initial remark to make about the general tendency to claim to behave in particular ways. This tendency varies considerably from one country to another - an average 27% of Portuguese say they often behave in one or other of the ways listed, as against 58% of Luxembourgers, while the other countries are spread between these two extremes. The gap is wide and warrants investigation of the different habits and national variations - not by examining the absolute differences between the percentages, but the relative differences in the light of the general tendency of each country to give us the answer that interests us here (i.e. "often"). In other words, there is no point in, for example, repeating that particular types of behaviour are less common in Portugal, because that is the general tendency in that country. But it is, on the other hand, more interesting to see that a particular type of behaviour is, in view of the propensity observed in that country, considered to be particularly common or uncommon. The results by country are set out in graph No 2. The diagrams give two series of data - the results actually obtained in the country concerned (striped column) and an estimation of the results that would have been obtained if the country had simply followed its general tendency to say "often" (white column). The difference in column length expresses, in each case, the propensity of the country in question to move towards or away from what should be its norm given its average propensity to give the "right answer" for a given type of behaviour.

So cutting down on alcohol consumption (or cutting it out altogether) seems to be something which is more common in Spain and France and less common in the United Kingdom and Denmark.

Eating fresh vegetables and fruit are two habits which seem to be very strong throughout the Community, except in Portugal. The differences between the countries are very slight, as, at a much lower level, is the attention paid to fruit consumption. However, the intake of foods rich in fibre, which is generally rare, varies considerably from one country to another. The Danes, the Dutch and the British, all northern

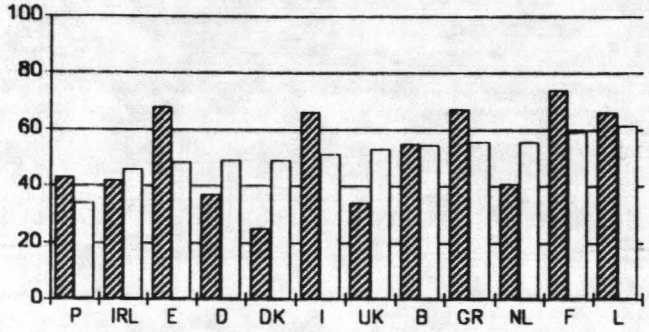
Europeans, seem to be bigger fibre consumers than the Spanish, the Italians and the French.

Weight watching seems fairly common in Germany and uncommon in Belgium. Lastly, shunning the sun is more particularly common in France and Portugal, but far less so in Ireland and the Netherlands.

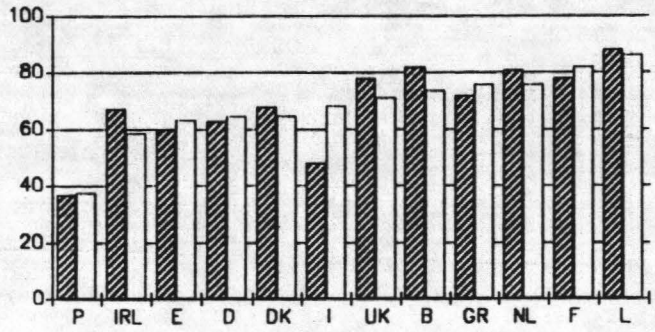
GRAPH 1.2.

Tendency towards particular behaviour, according to national propensity to watch health

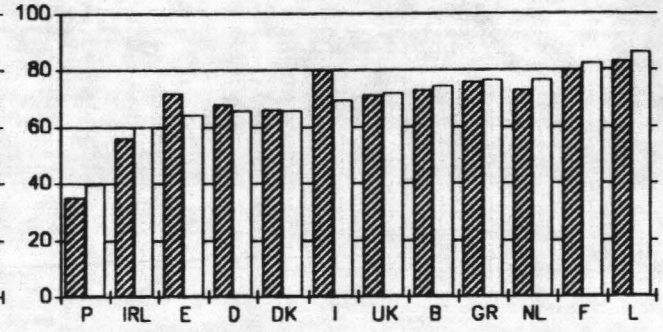
Cut down consumption of alcoholic drinks (total "often" & "abstain")



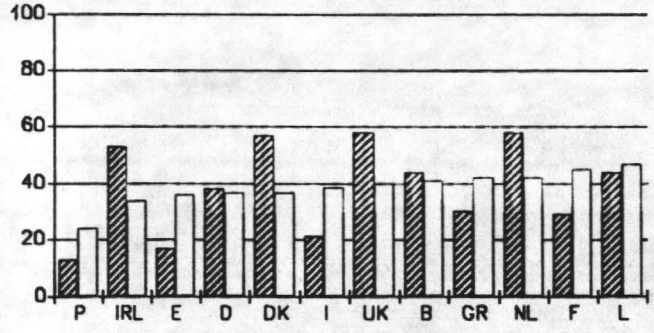
Eat fresh vegetables (% of "often")



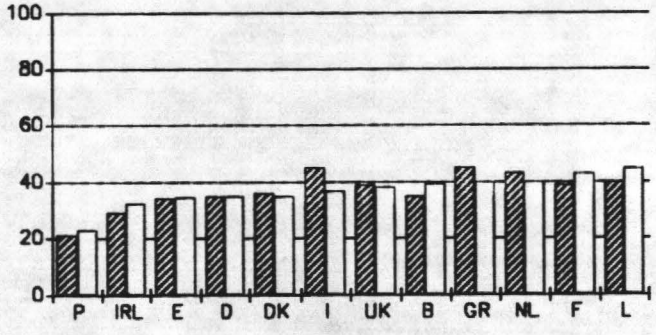
Eat fresh fruit (% of "often")



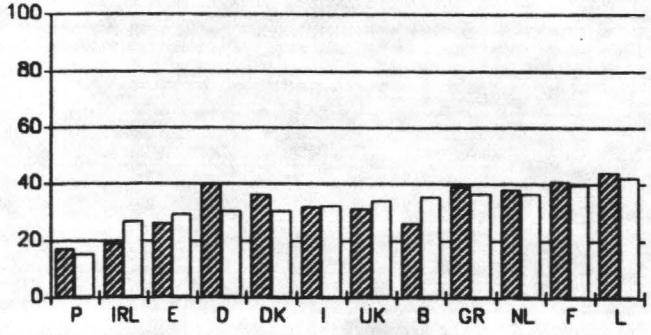
Eat food rich in fibre (% of "often")



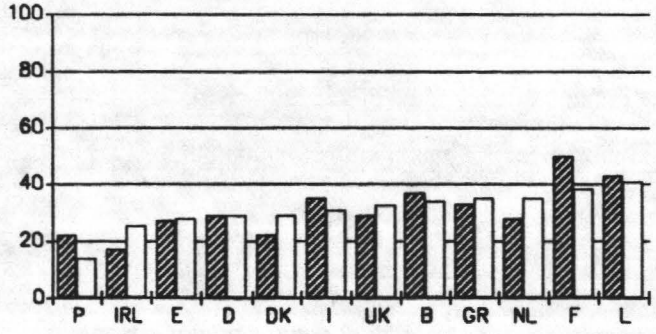
Eat non-fatty foods (% of "often")



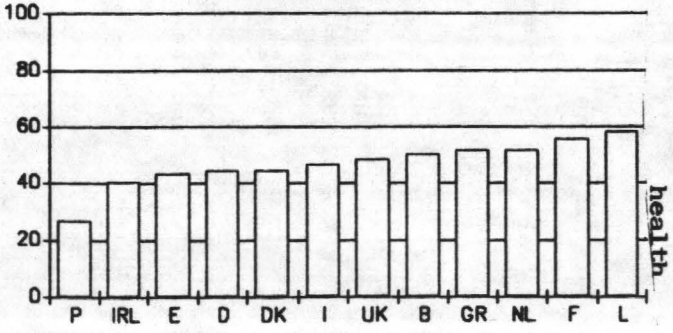
Watch weight (% of "often")



Avoid exposure to the sun (% of "often")



General tendency towards healthy behaviour (average "often")



Factors other than nationality cause the frequency of these various types of "admitted" behaviour to vary. Sex appears to be the most important one - men tend to do the things on the list less often than women do. In some cases, such as eating non-fatty foods and watching ones weight, the differences are very clear and show just to what extent the sexes view their bodies differently. The only type of behaviour more common among men than women is cutting down on their alcohol intake. But this result should not mislead. All it does is reflect the fact that women are more likely to be abstainers, overall, and are therefore less often in a position to cut down (see Table 1.6.).

Age often seems to be a moderating influence. With the years, some things get more common - particularly eating fresh fruit and vegetables and non-fatty foods, watching one's weight and, above all, fleeing the sun.

Education really only affects two things, which are commoner amongst the better educated, and they are the tendency to cut down the alcohol intake and to consume food that is rich in fibre. Income has its greatest influence on these two things too - which would suggest that they are socially-typed kinds of behaviour.

Lastly, an interest in health information goes hand-in-hand with greater adherance to all the things on the list. Over and above any national socio-demographic and sociological factors, it would appear that behaving in this way is indicative of a more general state of mind, the degree of which varies from one individual to another and which leads to an interest in personal health and the adoption of a particular way of life.

TABLE 1.6.

Observance of particular habits

	Cut down on alcohol	Eat fresh vegetables	Eat fresh fruit	Eat food rich in protein	Eat non-fatty foods
WHOLE COMMUNITY	43%	90%	91%	60%	73%
Sex : . Male	51	89	90	55	66
. Female	35	92	93	65	81
Age : . 15-24	38	85	90	57	64
. 25-39	46	90	91	61	74
. 40-54	47	92	92	62	74
. 55 & over	40	93	93	61	78
Level of education					
.Low	41	91	91	55	73
. Average	43	90	91	65	72
.High	47	90	91	68	78
Household income					
. Low --	34	92	92	55	76
. -	43	90	91	58	72
. +	45	90	91	62	73
. High ++	48	90	92	63	75
Interest in health information					
. Often	45	93	94	66	78
. Sometimes	43	91	92	60	74
. Rarely	39	86	86	51	64
. Never	35	85	86	45	56

CHAPTER 2

CANCER AND ITS PREVENTION

2.1. KNOWING ABOUT CANCER

2.1.1. Closeness to cancer

Opinion poll specialists are well aware of the fact that some subjects are difficult to tackle in an interview and personal experience of cancer is one of them. But it was brought up twice during this survey, at two different times during the interview and in two different ways.

After the series of questions on the general state of health and eating and drinking habits, subjects were asked whether they had ever been seriously ill and if so, what they had suffered from. Cancer was one of the serious illnesses mentioned, along with heart disease, diabetes and nervous depression.

Then, after a series of questions on prevention, there was a further question about cancer in their entourage - i.e. their forebears, spouses, children, siblings, other members of the family and friends. The relatives were brought in to avoid just referring to "people close to you", which is imprecise and likely to be understood differently in different national cultures.

Question: Have you ever been seriously ill? If YES, could you tell me the type of illness you suffered from?

Never been seriously ill		73%
Have been seriously ill:		24%*
Heart disease	5%	
Diabetes	2%	
Nervous depression	5%	
Cancer	1%	
Other	13%	
?		3%
		100%

Question: Have there been any cases of cancer amongst your close friends and relatives? If YES, which ones?

No		41%
Yes:		56%**
Grandparents	12%	
Parents	15%	
Spouse	3%	
Children	1%	
Sibling	5%	
Other member of family	22%	
Close friend	13%	
Other	8%	
?		3%
		100%

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* The detail for each disease is slightly higher than 24%, as some people say they have had several serious illnesses.

** The total by degree of relationship is higher than 56% because subjects gave more than one answer.

Only 1% of our subjects said they personally had had cancer. The specialists may find this figure low. It has to be admitted that people currently at an active stage of the disease are probably not in the sample of individuals available when a survey is run. There may also be a certain reluctance to admit to having had the disease. The proportion varies from one country to another between a maximum of 2.7% in Germany and a minimum of 0.2% in Ireland.

An idea of the considerable impact of cancer is given by the fact that 56% of our corpus have had one or more cases of cancer among the people close to them.

Four countries (Denmark with 66%, the United Kingdom and the Netherlands with 65% and France with 61%) emerge clearly above the European average of 56%. And three - Portugal with 41%, Greece with 43% and Ireland with 45% - are well below.

An analysis of the answers run in the light of the socio-demographic factors suggests that the existence of cases of cancer in the entourage is more easily admitted - or maybe better known - in more educated and better-off circles.

And positive replies are more common among women, as well as increasing with age - which comes as no surprise - up to 55 years (see Table 2.1.).

A number of correlations were sought between the proportion, by country, of people who have had a case of cancer in their entourage and the macro-economic and demograhic data (Eurostat). The following emerged:

	r
- with the infant death rate	-.758
- with the per capita spending on tobacco	+.526
- with life expectancy at birth	+.806

TABLE 2.1.

Closeness to cancer

		Say they have had cancer * %	Have had one or more cases of cancer in their entourage %
WHOLE COMMUNITY		1.2	56
Country :	Belgique	1.6	49
	Danmark	1.4	66
	Deutschland	2.7	50
	Ellas.(Grèce)	1.2	43
	Espana	0.7	51
	France	0.7	61
	Ireland	0.2	45
	Italia	0.7	55
	Luxembourg	0.7	55
	Nederland	0.9	65
	Portugal	0.6	41
	United Kingdom	1.2	65
Sex :	Male	0.8	51
	Female	1.7	60
Age :	15-24	0.3	45
	25-39	0.7	57
	40-54	2.0	61
	55 & over	1.7	58
Level of education			
	Low	1.1	55
	Average	1.6	54
	High	0.8	61
Household income			
	Low - -	1.6	53
	-	1.2	55
	+	1.0	56
	High + +	1.0	63
Opinion Leadership			
	Strong + +	1.4	62
	+	1.8	58
	-	1.0	56
	Weak - -	0.7	51

* Since the percentages are so low, rounding up or down is to be avoided - hence the decimals.

2.1.2. Opinions on the causes of cancer

Europeans feel that by far the commonest cause of cancer is tobacco. It is followed by radioactivity and pollution and then by certain professional activities. Alcohol is only in fifth place. Bad diet (too much fat and not enough fruit and vegetables) is rarely mentioned.

Question: With the help of this list, could you tell me what are, in your opinion, the most common causes of cancer? (SEVERAL RESPONSES POSSIBLE)

The answers were, in decreasing order:

	%
. Tobacco	72
. Radioactivity	54
. Pollution	44
. Working in certain trades or professions	34
. Alcohol	30
. Excessive exposure to sunlight	27
. Heredity	24
. Psychological problems, stress	17
. Viruses	14
. A diet with too much fatty food	13
. A diet lacking sufficient fresh fruits and vegetables	8
. ?	7
	*

Subjects were not asked to put the list of cancer causes in order of relative importance - this is beyond the public - but just to say which factor(s) they thought were the commonest cause(s). They gave three or four on average. So the answers reflect how prominent the various factors are in the public eye.

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* Total greater than 100 as it was possible to give more than one answer.

Specialists may well be surprised at the relatively high position of radioactivity and pollution, and of certain trades and professions, as compared to alcohol. But these, of course, are opinions expressed by the whole of the corpus in 12 countries and they are determined by a large number of variables, including nationality and level of education. It is people from the poorest environments, with low levels of education and low incomes, who most commonly mention alcohol as a cause of cancer - as if they still remembered a time when alcoholism was the result of poverty and one of the stigmas of the lower classes. Blaming alcohol for cancer is where Europeans from different countries differ most. It is most commonly listed in France (63%) and least commonly in countries such as Denmark (13%) and the United Kingdom (11%).

However, the important thing in these answers is that tobacco is seen to be the biggest cause of cancer by the vast majority of respondents in all the countries without exception (65% in Germany and 83% in France). Furthermore - and this is worth further investigation - smoking habits have little effect on opinions as to the main causes of cancer. Almost as many heavy smokers as non-heavy smokers say tobacco is a major cause of cancer.

	Quote tobacco as a major cause of cancer
According to smoking habits*:	
Have never smoked	75%
Used to smoke	78%
Smoke pipe or cigars	65%
Light cigarette smoker	71%
Average cigarette smoker	66%
Heavy cigarette smoker	65%
Total population	72%

* See description of smoking habits in chapter 3.

TABLE 2.2.

The commonest causes of cancer

1. Tobacco
2. Radioactivity
3. Pollution
4. Certain trades or professions
5. Alcohol
6. Excessive exposure to sun
7. Heredity
8. Psychological problems
9. Viruses
10. Too much fatty food
11. Insufficient fruit and vegetables

		1	2	3	4	5	6	7	8	9	10	11
WHOLE COMMUNITY		72	54	44	34	30	27	24	17	14	13	8
Country :	Belgique	72	58	42	38	33	38	27	21	18	19	12
	Danmark	68	42	43	48	13	15	14	16	4	22	21
	Deutschland	65	56	53	44	21	30	33	25	14	18	15
	Ellas (Grèce)	70	67	44	18	21	19	28	44	8	16	15
	Espana	67	39	23	23	28	14	22	8	14	6	5
	France	83	51	39	26	63	33	21	18	16	11	4
	Ireland	75	63	32	26	20	33	25	17	8	10	10
	Italia	75	66	63	30	33	15	21	9	18	10	4
	Luxembourg	73	69	47	43	45	42	19	25	15	15	11
	Nederland	67	64	50	34	16	39	25	17	7	19	9
	Portugal	75	29	40	16	42	17	12	11	9	12	5
	United Kingdom	73	53	34	46	11	35	23	17	16	13	9
Sex :	Male	72	54	46	36	28	23	23	16	14	13	8
	Female	73	55	42	32	32	30	25	18	14	13	8
Age :	15-24	75	52	43	31	29	23	22	14	15	13	9
	25-39	74	58	45	39	29	33	23	17	14	11	8
	40-54	73	59	46	36	30	27	27	21	13	13	9
	55 & over	68	49	42	31	32	23	24	16	13	15	8
Level of education :												
	Low	69	49	43	29	32	22	23	13	14	12	7
	Average	74	57	44	38	29	29	24	18	14	13	9
	High	78	61	48	43	25	36	27	25	13	15	10
Household income :												
	Low - -	69	48	40	29	33	23	25	15	15	15	9
	-	71	55	45	35	33	25	23	16	15	14	9
	+	74	57	44	36	31	27	25	18	13	11	7
	High + +	78	59	47	40	24	33	27	18	13	12	9
Opinion Leadership												
	Strong + +	75	62	51	42	23	34	25	27	11	13	10
	+	74	57	47	38	28	29	25	21	14	15	10
	-	73	55	44	35	31	26	25	16	15	12	8
	Weak - -	68	44	36	24	34	20	20	10	13	10	6

2.2. ATTITUDE TO PREVENTION

2.2.1. Credibility of prevention

Question: In your opinion, is it possible nowadays to reduce the risk of getting some kinds of cancer by following a health way of life?

	%
. Yes	74
. No	13
. ?	13
TOTAL	100%

Three quarters of our respondents think that the risk of (some kinds of) cancer can be reduced by following a healthy way of life. In fact , there ought to have been even more positive answers to reflect the assurances which the cancerologists are now giving us. And, although 74% of the public agrees that the risk can be reduced, that is not to say - as we shall see later on - that these people can assess the probability of avoiding cancer properly.

Men and women give very similar replies, as do the various age brackets, but the better the education and the higher the income, the more likely respondents are to say yes. This shows the need for a campaign to educate and inform the general public, and for better access to health facilities for the underprivileged classes.

There is a considerable national variation between the answers.

Countries can be divided into three categories:

- those where there is a very strong belief in a healthy life as a way of preventing cancer (more than 80%) - the Netherlands, Luxembourg and France;
- those where confidence in this is below average (60-65%) - Greece, Spain, Ireland and Denmark;
- all the other countries, with scores around the average.

If we take another look at the habits described in chapter 1, it emerges that the above differences in opinion only partially concord with with those noted for behaviour. The Netherlands, France and Luxembourg are amongst both the countries convinced in a healthy life as a means of cancer prevention and those which observe the basic rules of health. Greece, Spain, Ireland and Denmark lag behind on both of these. The relation between the two is less obvious in the case of the other countries.

Obviously, it is difficult for non-specialists to know the theoretical potential (three cases out of four) or the actual possibilities (one case out of three) of preventing or avoiding cancer.

We have just seen that three out of four Europeans think that a healthy life reduces the risk of cancer. The following question was put to all subjects, regardless of how they answered the first question.

Question: In your opinion, do you think cancer can be prevented or avoided...?

	%
. In three cases out of four	10
. In half of cases	28
. In one case out of four	23
. Less often	16
. Never	8
. ?	15
TOTAL	100

Here we have about one person out of four thinking that cancer is a kind of unavoidable fate (or not answering). But it is particularly interesting to see that only six Europeans out of 10 (61%) think that cancer can be prevented or avoided in at least a quarter of all cases - which is less, the cancer specialists tell us, than medicine can achieve at the present time. So at least one European out of four is short of information on this point.

Socio-demographic variables such as sex, age, education and so on mainly affect the relative proportion of those who have an opinion and those who do not. But the pessimists - or, more likely, the ill-informed (who say that a healthy way of life does not reduce the risk of cancer or that less than a quarter of cancers can be prevented or avoided) - make up roughly the same percentage of each socio-demographic group.

The differences between the various countries present a different picture altogether, as the following few examples show.

In France, 81% of respondents believe that healthy living can reduce the risks of cancer and 78% believe it can be prevented or avoided in at least one case out of four. This is the biggest proportion of people who seem to be relatively well informed (in all 12 countries).

In the Netherlands, 82% believe that a healthy life will help, but only 47% think at least one cancer out of four can be prevented or avoided.

Only 62% in Denmark believe that a healthy way of life can reduce the risk and 57% say that at least a quarter of cancers could be prevented or avoided. But 28% of Danes decline to give an opinion.

(See Table 2.3.).

CONFIDENCE IN CANCER PREVENTION

		A HEALTH LIFE REDUCES THE RISK OF CANCER				CANCERS CAN BE PREVENTED OR AVOIDED IN			
		Yes	No	?	Total	½ of all cases	¼ of all cases	less	?
	WHOLE COMMUNITY	74	13	13	100	38	23	24	15
Country	Belgique	78	10	12	100	39	26	24	11
	Danmark	62	19	19	100	37	20	15	28
	Deutschland	74	13	13	100	37	22	28	13
	Ellas	60	21	19	100	22	27	34	17
	Espana	64	17	19	100	29	15	30	26
	France	81	10	9	100	55	23	14	8
	Ireland	65	17	18	100	28	24	31	17
	Italia	76	12	13	100	37	27	26	10
	Luxembourg	81	7	12	100	39	31	18	12
	Nederland	82	10	8	100	25	22	41	12
	Portugal	73	5	22	100	27	20	18	35
	United Kingdom	76	13	11	100	36	24	23	17
Sex	Male	76	12	12	100	38	22	26	14
	Female	73	13	14	100	37	24	23	16
Age	15-24	76	13	11	100	40	25	23	12
	25-39	76	14	10	100	42	24	22	12
	40-54	76	12	12	100	38	23	26	13
	55 & over	70	13	17	100	32	20	26	22
Level of education	Low	69	14	17	100	33	20	28	19
	Average	78	13	9	100	40	26	22	12
	High	82	10	8	100	45	24	20	11
Household income	Low - -	70	13	17	100	34	19	27	20
	-	74	13	13	100	38	24	24	14
	+	77	13	10	100	40	25	23	12
	High + +	81	11	8	100	44	25	22	9
Opinion Leadership	Strong + +	80	12	8	100	47	20	23	10
	+	78	12	10	100	41	25	23	11
	-	75	14	11	100	37	24	25	15
	Weak - -	66	13	21	100	30	19	28	23

2.2.2. Experience of cancer screening

About one European out of three, overall, claims already to have been screened for cancer, although the answers vary considerably with the sex - there are fewer than a fifth of the men but nearly half the women.

Question: Have you already had any medical examinations for screening of cancer?

	Total %		Men %		Women %	
. Several times	22)	32	9)	17	34)	46
. Once	10)		8)		12)	
. No	66		81		52	
. ?	2		2		2	
TOTAL	100		100		100	

Another variable which has an important part to play, combined with sex, is age* - 61% of women in the 40-49 age bracket have been screened at least once, but the age at which men have the highest percentage here is greater (60-69) and the figure itself is half (28%) the women's figure.

So, there is a big gap between the norms corresponding to optimum medical monitoring from age 50-60 onwards and the practices observed. However, we are dealing with examinations which the patients have been told about and are aware of. Information practices may vary with country (or level of actual or supposed receptivity of the patient). The fact is that the answers to this question differ widely from one country to another.

Germany has the largest number of positive answers (men 36% and women 76%). And Italy, Spain and Portugal have the fewest. The figures for France, Ireland and the Netherlands are relatively low.

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* Although, in the absence of data gathered in a series of surveys run over a long period, it is not possible to make a distinction between the effect of the life cycle (ageing of the individual) and the effect of generation (changes in behaviour, better health protection etc).

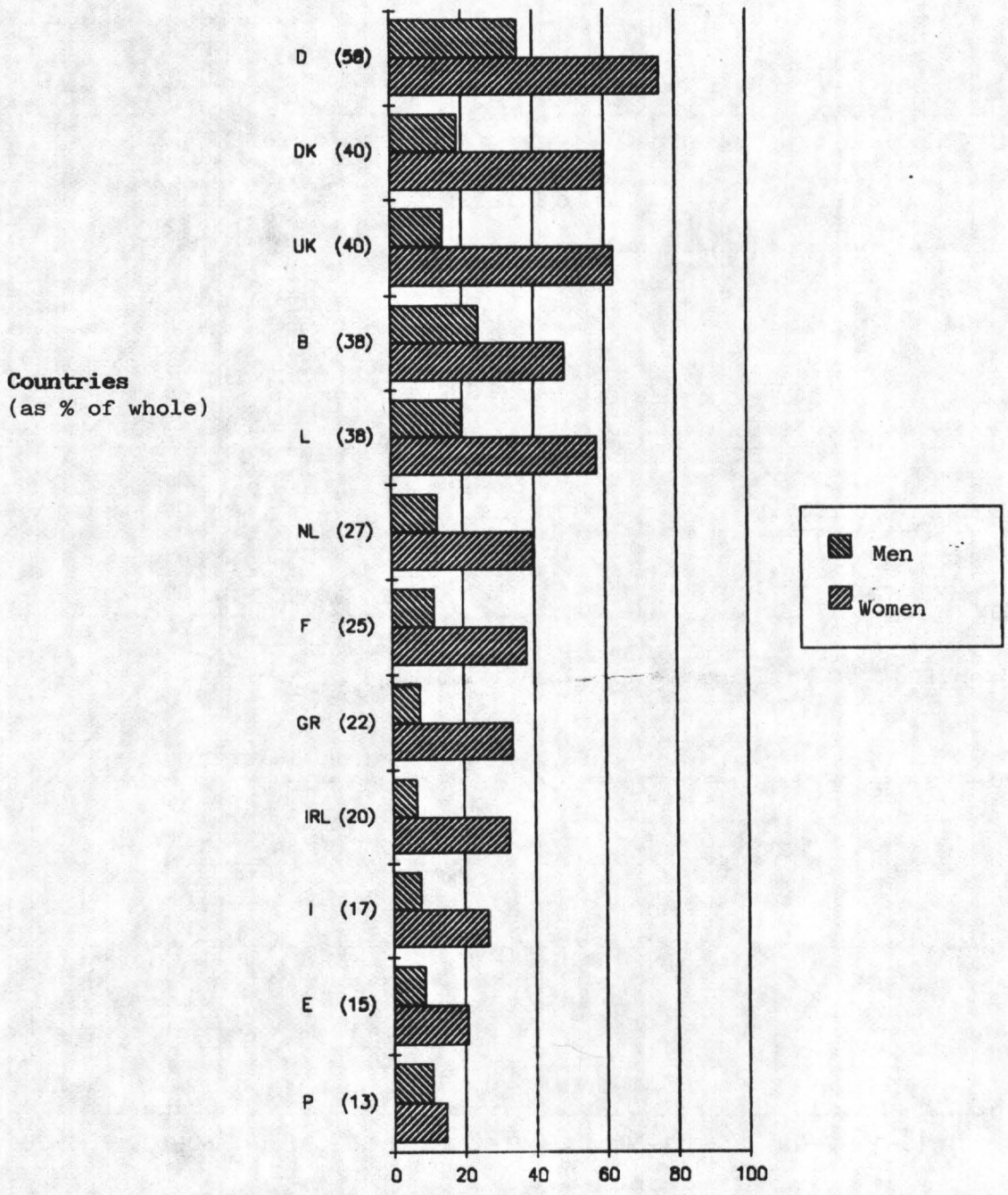
The greatest experience of screening is found, above all, in the 40-50 age group - except in Germany, where it increases regularly with age.

The level of education has only a relatively small effect on the answers, probably because the initiative for the screening is taken by the medical profession rather than the patients.

(See graphs Nos 2.1. and 2.2. and table 2.4.).

GRAPH 2.1.

Experience of cancer screening, by sex and country



GRAPH 2.2.

Experience of cancer screening, by sex and age

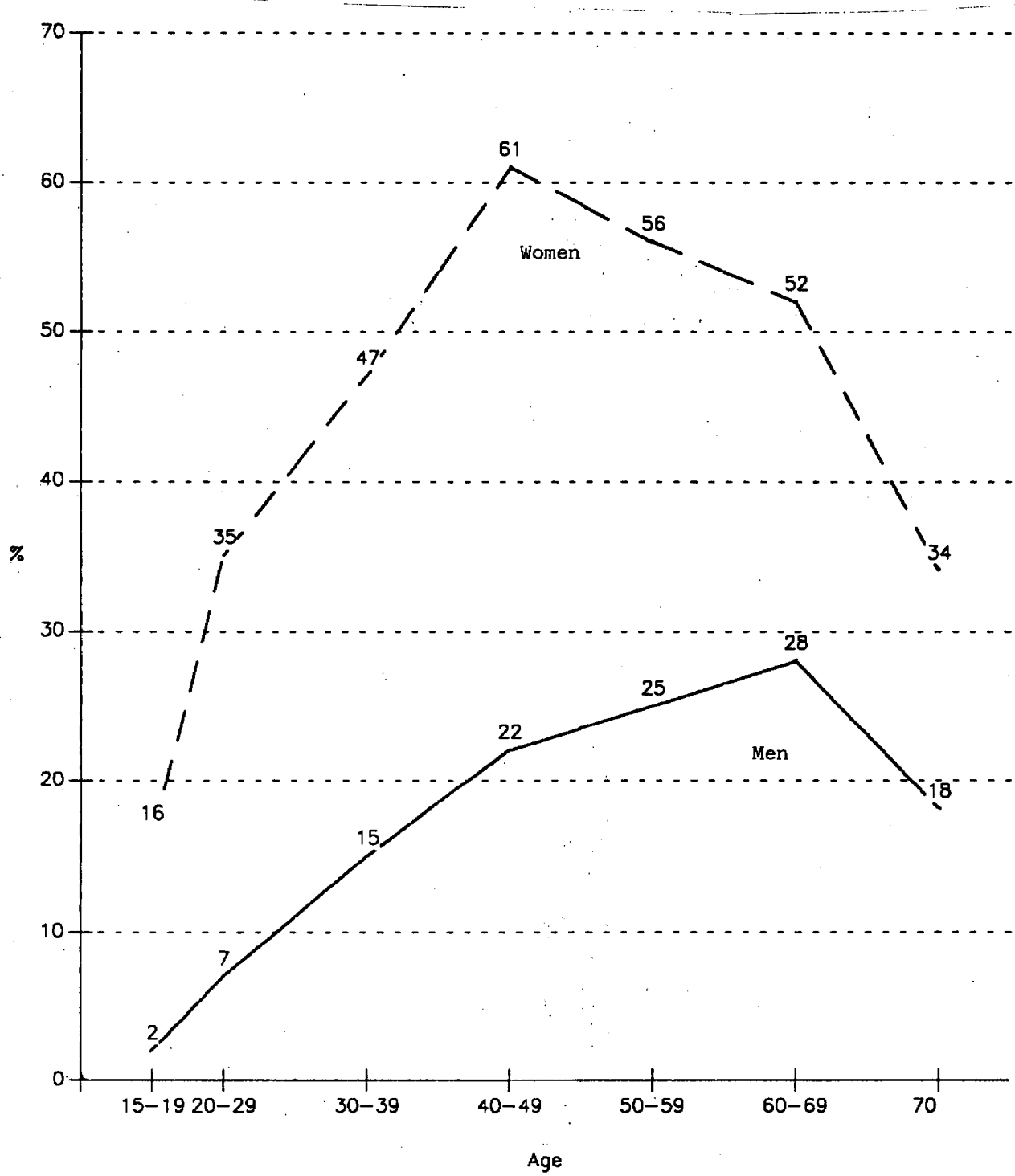


TABLE 2.4.

Experience of cancer screening

		Several times	Once	Total yeses	No	?	Total
WHOLE COMMUNITY		**22**	**10**	**32**	**66**	**2**	**100**
Country :	Belgique	27	11	38	59	3	100
	Danmark	28	12	40	58	2	100
	Deutschland	43	15	58	41	1	100
	Ellas (Grèce).....	10	12	22	77	1	100
	Espana	9	6	15	80	5	100
	France	16	9	25	74	1	100
	Ireland	11	9	20	77	3	100
	Italia	11	6	17	81	2	100
	Luxembourg	28	10	38	60	2	100
	Nederland	18	9	27	71	2	100
	Portugal	6	7	13	80	7	100
	United Kingdom	28	12	40	59	1	100
Sex :	Male	9	8	17	81	2	100
	Female	34	12	46	52	2	100
Age :	15-24	5	6	11	87	2	100
	25-39	25	10	35	63	2	100
	40-54	30	11	41	58	1	100
	55 & over	25	11	36	61	3	100
Level of education :	Low	22	10	32	65	3	100
	Average.....	21	10	31	68	1	100
	High.....	23	11	34	65	1	100
Household income :	Low - -	20	9	29	68	3	100
	-	21	11	32	67	1	100
	+	23	10	33	65	2	100
	High + + ...	26	10	36	63	1	100
Opinion Leadership :	Strong + + ...	21	11	32	68	-	100
	+	24	11	35	63	2	100
	-	23	9	32	67	1	100
	Weak - - ...	19	10	29	67	4	100

A big drive is obviously called for both with the credibility of prevention and with screening. As things stand, the public is still not sufficiently aware of the fact that healthy living is a good thing and it is doubtful about the proportion of cancers which can be prevented or avoided. So it is ill prepared .to comply with any recommendations. Yet there is a nucleus of people - around 33% - who believe in both the effectiveness of healthy living and the possibility of preventing or avoiding cancer in at least one out of every two cases. These are the two notions that have to be brought home to the general public if it is to abandon its fatalistic attitude and really follow the practical advice of the doctors.

The biggest lack, as public opinion is at the moment, is a proper ordering of ideas, an awareness of the links between living healthily and the real possibility of reducing cancer risks and the realization that screening exists and is useful. For example, it would be nice to find that more of those who think cancer can to a large extent be avoided are willing to undergo screening than the others, but, in fact, the two attitudes are virtually independent of each other.

Of those who think cancer can be avoided in:	**Have undergone screening on several occasions**
.Three quarters of cases	31%
. Half of cases	38%
. A quarter of cases	35%
. Less often	31%
. Never	25%

In other words, we are far from having a rational attitude here and it is with this in mind that the information campaigns should be run.

2.3. THE EUROPEAN CODE AGAINST CANCER

One of the aims of this survey was to try and evaluate the Europeans' degree of knowledge about the recommendations adopted by the European Committee of Cancer Experts with a view to preventing the disease.

These recommendations have now been grouped together under the heading of the European Code against Cancer.

An initial question, put to both men and women, had to do with knowledge of 11 recommendations and their opinions as to the problems of applying each of them.

The replies are set out in the following pages. We shall attempt to compare the opinions to the observed behaviour recorded in the other sections of this report.

A further question, put only to women, had to do with knowledge of three specific recommendations and with the actual application of each of them (cervical smears, breast checks and mammographies).

The chapter ends with a first measurement of the effect on the public of the beginning of the European campaign against cancer.

3.2.1. Recommendations for the whole male-female population

Question: Here is a list of recommendations which doctors have prepared to help reduce the risk of cancer. Could you read this and tell me what you think of it by replying to some questions I am going to put to you?

1. Which of these recommendations for the prevention of cancer did you know about already?
2. Are there any of these recommendations which appear to you to be the most difficult for you personally to carry out?

	Already known	Difficult to carry out
A. Do not smoke	88%	28%
B. If you cannot possibly avoid smoking, then smoke only cigarettes with a low tar content.	43%	4%
C. Do not smoke in the presence of others	45%	5%
D. Reduce your consumption of alcoholic drinks	49%	5%
E. Eat sufficient fresh fruits and vegetables	34%	4%
F. Eat plenty of cereals with a high fibre content	30%	6%
G. Eat low-fat foods	35%	10%
H. Avoid being or becoming overweight	35%	13%
I. Avoid, as far as possible, sunburn or intense or prolonged exposure to the sun, especially for children or if you are not used to it	52%	8%
J. See a doctor if you notice any bleeding or a change in the size or colour of any mole or beauty spot	58%	5%
K. See a doctor if you notice an unusual lump of abnormal bleeding, a persistent cough or persistent change in the voice	58%	5%
Don't know	4%	41%

Tobacco

The recommendation to abstain from smoking is generally known and, as we shall see later on, followed fairly well - an average of more than six Europeans out of 10 do not smoke (i.e. have never smoked or have stopped).

Far fewer people know about the other two tobacco recommendations - smoking low-tar cigarettes and not smoking in the presence of others.

But in spite of this wide knowledge of the risks of smoking, it seems difficult for the people directly involved, and heavy smokers especially, to stop.

	Pipe or cigarette smokers	Cigarette smokers *		
		Heavy	Average	Light
Do not smoke				
Known	81%	90%	86%	86%
Difficult	53%	46%	72%	84%
Low-tar				
Known	45%	50%	49%	47%
Difficult	7%	4%	9%	9%
Do not smoke in presence of others				
Known	49%	50%	43%	39%
Difficult	6%	8%	4%	9%

The attention paid to low-tar cigarettes as an anti-cancer measure varies widely from one country to another. The recommendation is fairly well known in Denmark, Ireland and the United Kingdom (by at least six people out of 10) - and these are the countries where the most cigarette buyers prefer low-tar brands. Only 19% of Portuguese have heard about the recommendation, while the figure for the other countries is about one out of three.

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* See the definition of the three categories of smoker in chapter 3 (page 62).

As for the recommendation not to smoke in front of other people - this is known about above all in France, Denmark, the United Kingdom, Ireland, Italy and Greece (by at least half the people). But it is little known in Germany, the Netherlands and Luxembourg.

Alcohol

The recommendation to cut down on alcoholic drinks is known to one out of every two Europeans, with considerably differences in the different countries - 70% in France, 62% in Italy and Denmark and 25% in the United Kingdom.

As we have already had the opportunity to emphasize in the previous chapters, the attitude to alcohol varies considerably from one country to another. The table below enables us to compare the answers from people in the 12 countries to the three questions on alcohol - knowing about the recommendation, trying to cut down and mentioning alcohol as a common cause of cancer.

	Know about the recommendation	**Try to cut down**	**Mention alcohol as a common cause of cancer**
	%	**%**	**%**
. France	70	74	63
. Italy	62	66	33
. Denmark	62	26	13
. Greece	57	67	21
. Luxembourg	55	66	45
. Portugal	53	43	42
. Spain	52	68	28
. Ireland	46	42	20
. Belgium	41	55	33
. Germany	40	37	21
. Netherlands	35	41	16
. United Kingdom	26	34	11

The French replies are very coherent and reveal a high degree of sensitivity to the problem.

In Germany, the Netherlands and the United Kingdom, on the other hand, have very low degrees of awareness about this.

In Denmark, subjects say they have heard about the recommendation, but they do not really put it into practice and they forget to mention alcohol as one of the main causes of cancer. The tendency is the same in Greece, Ireland and Spain.

Diet

The recommendations about diet are the least known ones - or, to be more precise, the ones least associated with the idea of cancer. Even in the most educated and financially comfortable circles, barely more than a third are aware of what is recommended.

So these are the points on which any information campaign ought to insist. However, very few people think that they would find these recommendations hard to follow - although there is some reservation about a low-fat diet.

Denmark, of all the countries, is by far the most aware about food - be it fruit and vegetable intake, high-fibre diets or low-fat foods. And Denmark too is the country which, our replies suggest, has the highest consumption of fresh fruit and vegetable and fibre. But the consumption of low-fat foods is low.

Avoid being overweight

Denmark and Italy seem best to realize the connexion between being overweight and contracting cancer. Elsewhere, particularly in France and the United Kingdom, information on this point is particularly weak.

But avoiding being overweight - and seeking a low-fat diet - is difficult for large minorities (of around 15-20%) in many countries.

Avoiding excessive exposure to the sun

This recommendation is fairly often known about, on average (by one out of every two Europeans), and particularly in the northern countries (Denmark, Ireland, Luxembourg and the United Kingdom).

Over and above this demographic factor, the degree of information varies with level of education - which once again shows how information campaigns should be angled.

Checking on beauty spots, abnormal bleeding and changes in the voice

Information on these last points is fairly good (58% on average) - and these are the recommendations it seems difficult to follow.

The best informed countries are Denmark, Ireland and Greece.

People in poor and ill-educated circles, and men in general, are clearly less well informed.

TABLE 2.5

The best-known recommendations

TOBACCO
1. Non-smoker
2. Low-tar
3. Doesn't smoke in front of others

DIET
4. Alcohol
5. Fruit & vegetables
6. High fibre
7. Fat

OTHER
8. Overweight
9. Sun
10. Beauty spots
11. Lumps & voice changes

		1	2	3	4	5	6	7	8	9	10	11
	WHOLE COMMUNITY	88	43	45	49	34	30	35	35	52	58	58
Country	: Belgique	76	35	40	41	33	32	38	33	49	41	44
	Danmark	90	65	59	62	69	64	69	59	67	85	88
	Deutschland	76	38	29	40	33	33	31	36	47	58	52
	Ellas (Grèce).....	98	50	48	57	54	31	46	39	55	74	73
	Espana	92	39	33	52	27	18	28	30	37	46	57
	France	91	35	60	70	23	19	29	25	59	64	64
	Ireland	97	66	55	46	47	56	36	39	65	79	83
	Italia	98	46	51	62	48	36	56	51	53	69	65
	Luxembourg	85	36	29	55	44	36	45	44	63	59	63
	Nederland	84	35	30	35	38	36	38	31	55	63	69
	Portugal	85	19	33	53	21	13	24	30	32	34	33
	United Kingdom	87	59	57	26	30	33	27	27	61	46	54
Sex	: Male.....	88	45	46	49	33	28	35	33	49	52	53
	Female.....	88	42	45	49	35	31	36	36	55	62	63
Age	: 15-24	89	44	45	49	30	24	32	31	48	48	49
	25-39	91	48	49	48	33	30	34	33	60	62	64
	40-54	89	45	45	50	35	32	37	36	54	62	62
	55 ans & over.....	84	36	43	49	36	32	37	37	46	56	57
Level of education												
	: Low	87	39	42	51	33	28	35	35	45	55	57
	Average.....	88	44	47	46	32	29	33	32	54	56	56
	High	93	50	52	49	38	38	40	38	67	68	68
Household income												
	Low - - ...	86	38	42	49	35	28	35	34	44	54	56
	-	86	42	46	51	33	27	37	36	51	57	58
	+	89	43	46	50	33	31	36	34	54	58	59
	High + + ...	93	52	46	46	37	35	36	37	62	64	65
Opinion Leadership												
	: Strong+ + ...	92	52	49	48	39	36	39	36	63	64	67
	+	89	47	47	51	37	34	38	37	57	61	61
	-	89	41	45	47	32	28	34	34	52	58	57
	Weak - -	83	37	42	49	28	23	31	32	41	50	52

TABLE 2.6.

The hardest recommendations to follow

TOBACCO

1. Non-smoker
2. Low-tar
3. Doesn't smoke in front of others

DIET

4. Alcohol
5. Fruit & vegetables
6. High fibre
7. Fat

OTHER

8. Overweight
9. Sun
10. Beauty spots
11. Lumps & voice changes

		1	2	3	4	5	6	7	8	9	10	11
WHOLE COMMUNITY		28	4	5	5	4	6	10	13	8	5	5
Country	: Belgique	25	4	8	9	4	6	5	7	3	4	4
	Danmark	43	8	11	9	3	3	20	17	13	2	3
	Deutschland	28	6	6	8	4	8	12	15	9	10	8
	Ellas (Grèce).....	29	5	6	6	6	7	9	9	12	3	3
	Espana	27	2	3	4	4	4	5	6	6	5	3
	France	30	2	5	5	4	6	11	12	6	3	4
	Ireland	31	6	7	6	4	6	8	12	6	3	4
	Italia	30	5	6	5	5	8	17	19	13	8	7
	Luxembourg	36	2	4	12	5	13	20	17	15	4	5
	Nederland	36	4	3	5	2	3	8	13	10	6	8
	Portugal	23	1	2	5	2	5	8	8	3	3	3
	United Kingdom	25	2	2	3	2	3	6	11	6	1	2
Sex	: Male	35	5	5	7	4	6	11	10	8	5	4
	Female.....	23	3	4	4	3	6	9	15	9	6	6
Age	: 15-24	31	4	6	7	4	7	11	9	11	5	4
	25-39	36	3	5	5	4	6	9	12	9	5	5
	40-54	29	4	4	6	3	5	10	16	9	5	4
	55 & over	20	3	3	4	3	5	10	14	5	6	6
Level of education												
	: Low	26	3	4	5	3	5	11	14	8	5	5
	Average....	30	4	5	7	4	6	9	12	8	5	5
	High.....	32	3	4	5	4	7	10	11	11	5	5
Household income												
Low	- -	26	4	5	5	3	4	10	12	7	5	6
	-	30	3	6	5	3	6	11	15	7	6	6
	+	29	5	4	6	5	7	12	13	9	5	5
High	+ +.....	32	5	5	6	4	7	9	13	11	5	5
Opinion Leadership												
Strong	+ + ...	36	5	5	7	4	6	10	13	11	5	5
	+	30	4	5	7	5	6	12	14	9	5	5
	-	29	4	5	5	3	6	9	13	9	6	5
Weak	- -	22	2	4	4	3	5	9	11	5	5	5

2.3.2. Recommendations for women

Question: (WOMEN ONLY) Here is a list of recommendations which only apply to women.

1. Which of these recommendations did you know about already? (SEVERAL RESPONSES POSSIBLE)

2. Which of these do you actually follow yourself? (SEVERAL RESPONSES POSSIBLE)

	Already known %	**Actually followed %**
. Above 20-30 years of age, have a regular cervical smear done every three to five years	75	43
. Check breasts regularly	84	50
. If it is possible, undergo mammography (an x-ray of the breasts) from the age of 50 onwards	58	13
. Don't know	10	36

We can conclude from these answers, which correspond to the female population of Europe of 15 years and over, that the level of information is fairly good when it comes to cervical smears and breast checks and much less good when it comes to mammography. At the same time, there is a considerable gap between those who know about the importance of these tests and those who actually undergo them. The best example of this is the cervical smear, a cheap and easy test to run and one which, the cancer specialists say, would prevent three quarters of deaths from cancer of the cervix if it was practised.

Going beyond this general picture, we must now look at the differences - and they are considerable - observed in the different countries, in the different age groups and at the different levels of education.

Knowledge of the three recommendations, by country

- Women tend to be best informed in France, the United Kingdom, Denmark and Luxembourg.

- Women tend to be the least well informed in Belgium, Spain and Portugal. It should be added that these three countries, and Portugal especially, have large percentages of women who know nothing about any of the three recommendations mentioned here (Belgium 27%, Spain 27% and Portugal 42%).

- Germany scores near the European average for all three recommendations.

- Lastly, three countries stand out in certain ways. Greece is very well informed about cervical smears but scores below average on the other two points. Ireland and the Netherlands are very well informed about breast checks and cervical smears, but know little about mammographies. In Greece's case, let us not forget that it was a Greek biologist (Nicolas Papanicolaou) who perfected cervical smears and that there have been many information and education campaigns on these tests in this country.

Application of the recommendations, by country

- Four countries are well in the lead here - Luxembourg, France, Germany and the United Kingdom.

- Three countries have very low rates of application - Greece, Spain and Portugal.

- Italy and Denmark are near the European average.

- The Netherlands and Ireland have low rates of application for mammographies, but score near the average for the others.

- Lastly, Belgium stands out with its higher-than-average rate of application of the mammography recommendation.

There may be many reasons for the difference in the rate of application of these recommendations in the various countries. Not the least of them are level of socio-economic development, women's status, poor GP training in screening and shortcomings in the organization of screening programmes, public health services and social security facilities.

TABLE 2.7.

Recommendations for women

	Cervical smear		Breast checks		Mammography		?
	Known about	Applied	Known about	Applied	Known about	Applied	
WHOLE COMMUNITY	**75**	**43**	**84**	**50**	**58**	**13**	**10**
Country : Belgique	61	36	69	45	46	18	27
Danmark	87	45	86	48	62	6	7
Deutschland	73	46	86	64	57	18	8
Ellas	86	27	75	26	53	4	12
Espana	41	12	65	26	46	8	27
France	88	60	89	58	67	16	4
Ireland	86	30	93	44	35	2	7
Italia	77	40	90	45	70	11	5
Luxembourg	80	61	89	57	64	23	6
Nederland	84	49	87	56	43	6	6
Portugal	19	9	55	28	25	3	42
United Kingdom	89	55	91	55	60	13	4
Age : 15-24	62	24	79	39	42	3	13
25-39	86	63	90	61	65	11	5
40-54	78	53	87	59	65	20	7
55 ans & over.....	69	27	79	39	57	15	15
Level of education :							
Low	69	36	80	43	57	14	13
Average.....	78	47	86	54	56	12	7
High	87	59	94	66	69	10	4
Household income :							
Low - -	68	30	78	39	55	10	15
-	74	43	85	50	58	12	8
+	80	52	88	58	61	15	7
Opinion High + + ...	85	57	91	61	66	14	6
Leadership :							
Strong + + ...	88	54	92	60	69	14	5
+	78	47	88	56	62	14	7
-	75	43	86	51	58	12	8
Weak - -	57	37	76	41	52	11	16

The effect of age

Middle-aged women (25-55) are much better informed about the three recommendations under scrutiny here than those in the younger and older age groups. More of them also check their breasts and have cervical smears.

	15-24 years %	25-39 years %	40-54 years %	55+ years %
Cervical smear				
Known about	62	86	78	69
Applied	24	63	53	27
Breast checks				
Known about	79	90	87	79
Applied	39	61	59	39
Mammographies				
Known about	42	65	65	57
Applied	3	11	20	15

Graph No 2.3. illustrates these variations.

The general shape of variations by age shown in the graph holds good for almost every country in the Community, but with varying divergences from the national norm in the two extreme age groups.

In Spain, Portugal and Greece, the older women (55+) are far further from the national average than are women in that age group in other countries. However, there is a very important phenomenon to be observed in Greece - the youngest women (under 25) are far better informed than the national average, particularly when it comes to cervical smears. This is also the case of young Irish women.

In Belgium, it is the young women who least well informed (see Table 2.8.).

GRAPH 2.3.

Knowledge and application by women of three recommendations, by age

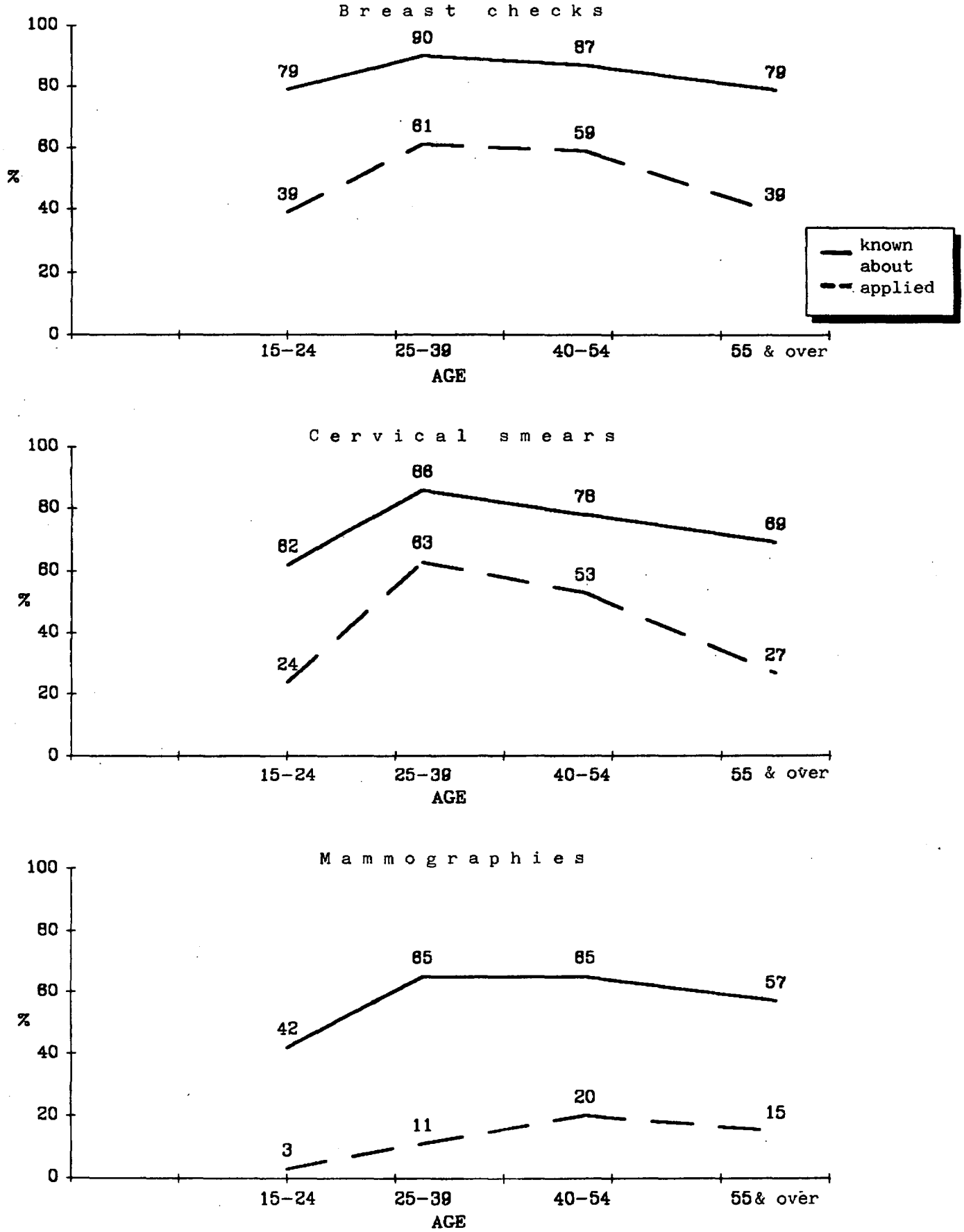


TABLE 2.8.

Recommendations for women - Effect of age, by country

B R E A S T C H E C K S

	15-24		25-39		40-54		55 and & over		Total	
	Known	Applied	Known	Applied	Known	Applied	Known	Applied	Known	Applied
WHOLE COMMUNITY	79	39	90	61	87	59	79	39	84	50
Country										
Belgique	52	30	75	51	74	54	71	39	69	45
Danmark	86	35	90	55	92	70	79	34	86	48
Deutschland	72	44	90	70	93	78	86	60	86	64
Ellas	86	29	84	39	80	27	57	11	75	26
Espana	63	21	74	34	70	27	54	22	65	26
France	84	57	94	70	91	64	85	37	89	58
Ireland	89	28	99	54	94	54	90	41	93	44
Italia	54	39	79	55	73	57	73	30	70	45
Luxembourg **.....	(89)	(46)	95	76	88	65	83	39	89	57
Nederland	84	36	96	70	89	64	71	40	87	56
Portugal	62	22	65	39	58	30	39	24	55	29
United Kingdom	86	40	94	69	93	68	87	37	91	55

C E R V I C A L S M E A R S

	15-24		25-39		40-54		55 & over		Total	
	Known	Applied	Known	Applied	Known	Applied	Known	Applied	Known	Applied
WHOLE COMMUNITY	62	24	86	63	78	53	69	27	75	43
Country										
Belgique	44	18	70	49	61	44	61	24	61	36
Danmark	81	36	95	57	92	65	79	25	87	45
Deutschland	56	24	85	70	78	60	68	33	73	46
Ellas	95	8	93	41	92	43	71	15	86	27
Espana	35	3	55	19	49	15	29	9	41	12
France	76	42	97	82	89	65	84	37	88	60
Ireland	80	8	93	46	90	48	81	21	86	30
Italia	60	18	88	57	79	54	78	29	77	40
Luxembourg **.....	69	42	89	81	79	68	83	47	80	61
Nederland	70	22	92	65	92	66	76	26	84	49
Portugal	11	3	30	17	19	9	13	5	19	9
United Kingdom	81	40	93	77	92	66	86	27	89	55

M A M M O G R A P H I E S

	15-24		25-39		40-54		55 & over		Total	
	Known	Applied	Known	Applied	Known	Applied	Known	Applied	Known	Applied
WHOLE COMMUNITY	42	3	65	11	65	20	57	15	58	13
Country										
Belgique	31	5	49	19	50	26	46	17	45	18
Danmark	47	1	59	5	77	10	62	8	62	6
Deutschland	43	6	66	4	64	28	53	25	57	18
Ellas	54	-	62	3	58	5	42	7	53	4
Espana	37	1	56	10	55	12	37	9	46	8
France	50	4	70	15	79	28	66	15	67	16
Ireland	31	2	35	3	38	-	35	3	35	2
Italia	54	2	79	10	73	17	73	14	70	11
Luxembourg **.....	54	4	70	22	74	47	61	17	64	23
Nederland	33	-	46	2	49	13	42	10	43	6
Portugal	23	2	34	1	23	5	21	5	25	3
United Kingdom	29	4	66	16	67	19	69	9	60	13

** Indicative figures (only 300 subjects).

Effect of the level of education

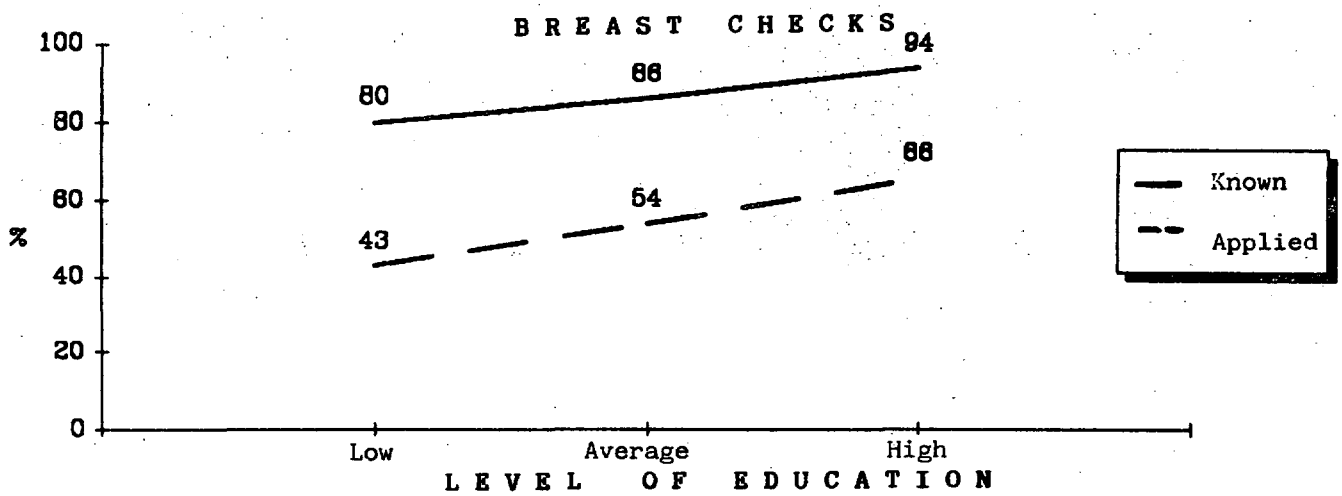
The more educated the woman, the more likely she is to know about and follow the recommendations about breast checks and cervical smears. But the gap between knowing and doing is high in all cases.

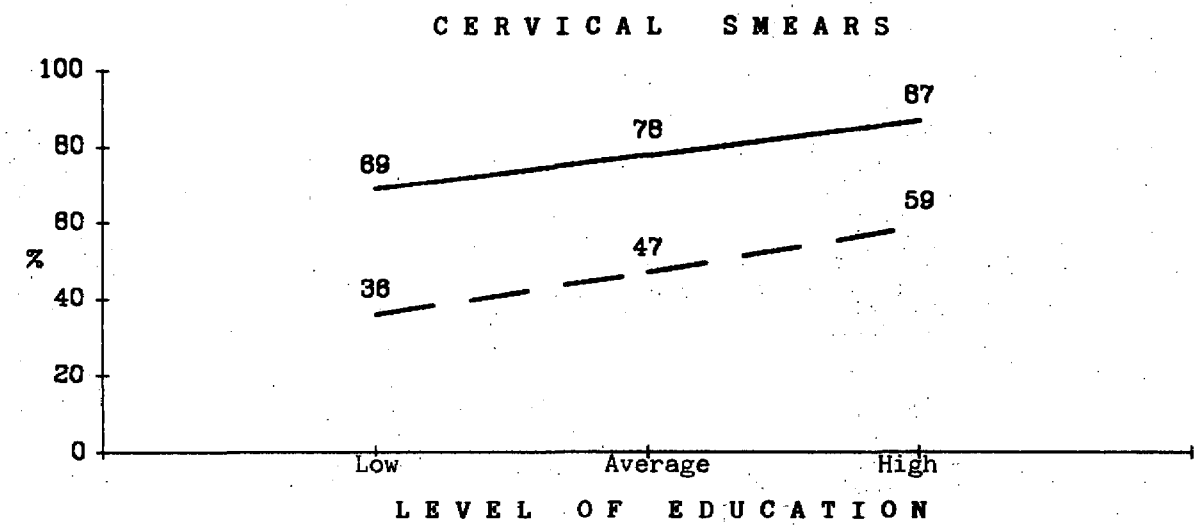
When it comes to mammographies, the level of education has a small effect on the knowledge but none at all on the application. The difference observed here very probably has to do with the fact that the decision to have a mammography depends on the doctor, not the woman (see Graph 2.4.).

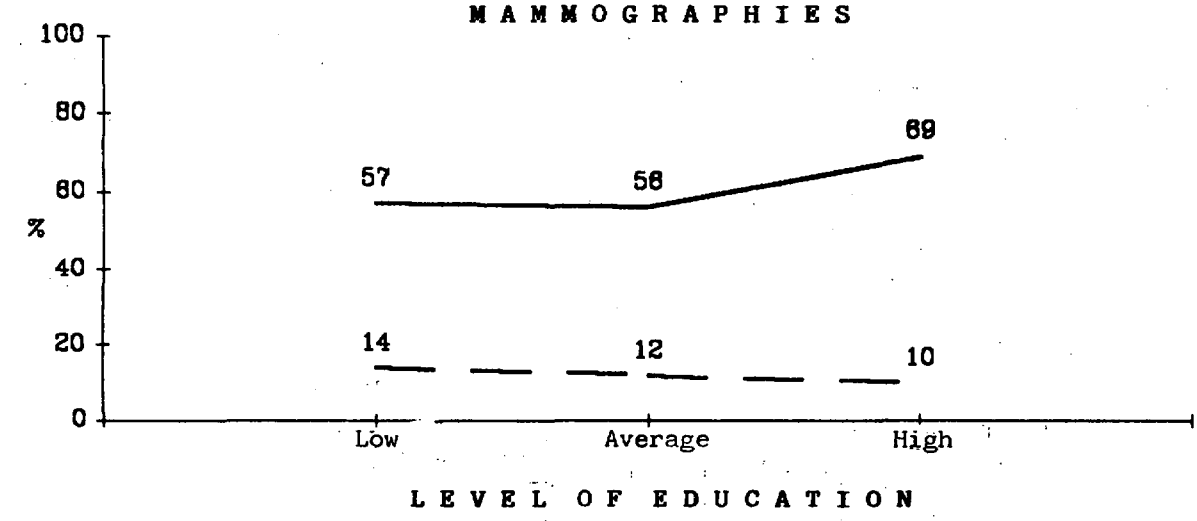
The above observations are confirmed in all the countries.

GRAPH 2.4.

Knowledge and application by women of three recommendations, by level of education







2.3.3. European Campaign against Cancer

Six months after the study whose results are set out in this report, an information campaign began, on 8-9 October 1987, on the Europe against Cancer programme. It therefore seemed a good idea to take the opportunity of the Euro-Barometer survey No 28 (interviews run on 5 October to 24 November 1987) to obtain an initial measurement of how this campaign had affected public opinion, knowing that this evaluation would be followed up every six months throughout the campaign.

Question: (Put in October/November 1987) Have you read anything about a European cancer prevention programme recently?

Positive answers from 37% of Europeans were recorded. There are considerable differences from one country to another - almost six out of 10 Italians, Luxembourgers and Portuguese say they have heard about the European cancer prevention progamme, but the figure is only two out of 10 in Ireland and the United Kingdom.

Public awareness does not seem to depend directly on the latent interest it expresses for information on health topics as measured six months previously in the main survey (see chapter 1). The Dutch, for example, are particularly interested in what the media have to say about health (57%), although only 25% of them say they have noticed any information about European cancer prevention recently. However, only 24% of Portuguese are interested in health topics and 58% of them have heard of the European programme.

Neither is there any direct link with usual screening practices. For example, 57% of Germans say they have already undergone cancer screening and only 25% of them have heard of the European cancer prevention programme.

So, in autumn 1987, it would appear that information about the European cancer prevention campaign was, objectively speaking, of very varying importance in the different countries, in the light of the coverage which the media in each gave at the start of the European programme.

The table below sets out the replies to the question on the information campaign on the Europe against Cancer programme. The countries are listed in descending order of recorded impact on the public. The answers to the other two questions mentioned above are also given in each case.

	Have heard about the European programme (autumn '87)	**Are interested in health information**	**Have already had cancer screening**
	%	**%**	**%**
. **Whole Community**	37	40	32
. Italy	59	39	17
. Luxembourg	58	45	38
. Portugal	58	24	13
. France	50	46	25
. Belgium	46	35	38
. Spain	36	47	15
. Greece	29	45	12
. Germany	25	35	57
. Denmark	25	37	40
. Netherlands	25	57	28
. Ireland	22	35	20
. United Kingdom	19	38	40

CHAPTER 3

TOBACCO

Tobacco, unanimously recognized by cancer specialists as one of the main carcinogens, was discussed, from two different angles, in our survey. The first angle, a somewhat sociological one, involved tobacco consumption, i.e. both smoking itself, smoking habits and the effects of smoking on the environment, particularly as far as non-smokers are concerned. The second was more political and involved steps that might be taken to reduce smoking.

3.1. TOBACCO CONSUMPTION

Three points were discussed here:

. being a smoker and the number of cigarettes consumed;

. precautions smokers take;

. the smoking environment.

Quantities consumed

Question: Which of the following things applied to yourself? (MULTIPLE RESPONSES POSSIBLE)

	EEC (12) %
You smoke cigarettes	35
You smoke cigars or a pipe	3
You used to smoke but you have stopped	19
You have never smoked	43
?	1
TOTAL	*

More than one European out of three (37%) is a smoker at the moment - more often than not a cigarette smoker - although four out of 10 have never smoked. This latter figure is a better reflection of the importance of tobacco in Europe, because it shows than more than half the Europeans (56%) are or have been smokers.

---

* Total slightly higher than 100 because people may smoke both cigarettes and a sigar or a pipe.

In fact, as we shall see later on, the proportion of people involved with tobacco is even greater, since three quarters of our respondents have smokers in their immediate environment. If we concenrate, for the moment, on the proportion of smokers, it emerges that it varies quite considerably from one country to another - from one out of three in Belgium, Portugal, Ireland and Italy to about one out of two (45%) in Denmark.

Question: (CIGARETTE SMOKERS ONLY) How many cigarettes do you smoke a day?

	EEC (12) %	
. Less than five	13	27
. 5 to 9	14	
. 10 to 14	18	57
. 15 to 19	19	
. 20 to 24	20	
. 25 to 30	8	15
. 31 to 34	1	
. 35 to 40	4	
. More than 40	2	
?	1	
TOTAL	100	
AVERAGE (Basis = cigarette smokers = 35% of the total population)	16.0	

European cigarette smokers are, overall, fairly heavy consumers of tobacco - they smoke an average of 16 cigarettes per day. The national variations are fairly clear-cut. The Italians, Danes and French seem only to smoke 13-14 cigarettes per day, as against 18 for Germans and Luxembourgers and almost 22 for the Greeks.

But the most important thing about these variations is that they seem to be linked to the various national perception of the importance of cancer. In fact, those countries with the lowest daily cigarette intake are also those where the knowledge of cases of cancer in the entourage is the greatest (see Graph 3.1.). And these countries are also those with the largest proportion of ex-smokers. In other words, it emerges that the awareness of cancer in a country, gauged according to the frequency of cancer in the entourage, is linked to smoking behaviour. Ultimately, what these relations seem to indicate is that some countries (particularly France, the United Kingdom, Denmark and the Netherlands) are more receptive and others (Portugal, Greece and Spain) less receptive to cancer prevention campaigns geared to the dangers of tobacco.

For the purposes of further analysis, we have divided the smokers into three groups:

- Light smokers - those who smoke less than 10 cigarettes per day. Their average consumption is 4.85. They represent a quarter of cigarette smokers.

- Average smokers - those who smoke between 10 and 24 cigarettes per day (average 17.16). They account for more than half our smokers.

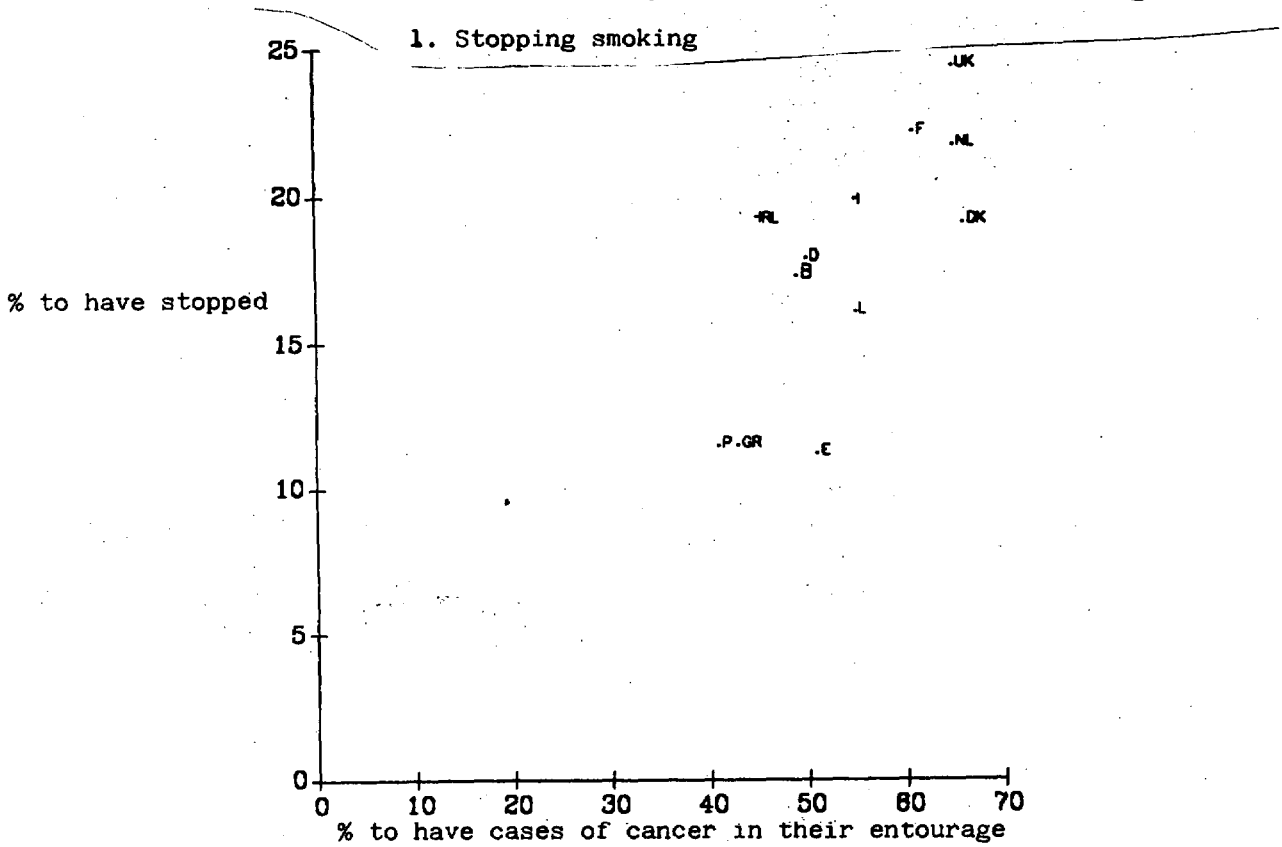
- Heavy smokers - those who smoke 25 cigarettes or more per day (average 32.63). They represent 15% of all cigarette smokers.

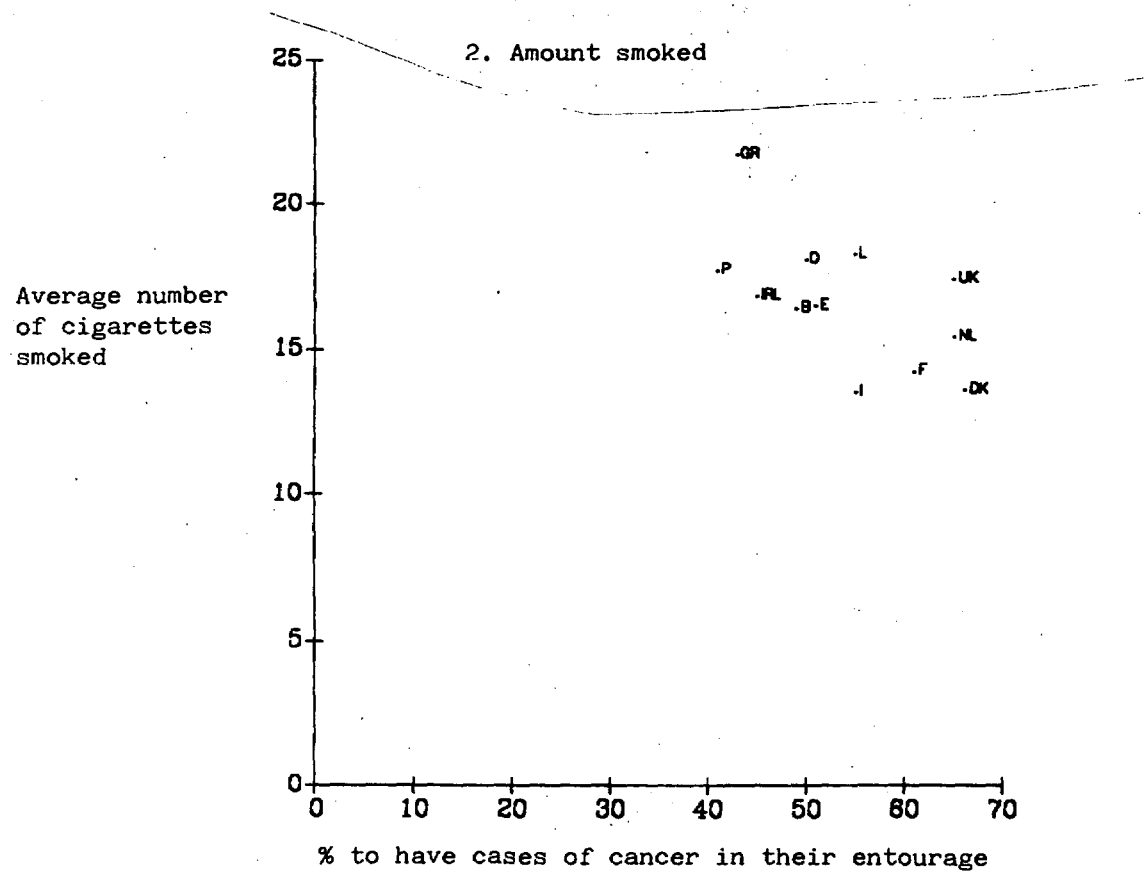
In other words, the ratio of cigarettes smoked in each of the groups is about 1:4:8.

This general table summing up the number of smokers and their level of consumption now enables us to look at the variations which emerge in the light of the various socio-demographic factors and countries (see Table 3.1.).

GRAPH 3.1.

Tobacco consumption and having cases of cancer in the entourage





Sex, age and no doubt generation too are the most important factors here. European women, overall, are far less likely to smoke than men (women 29% and men 45%). But in the younger generations (under 30), the differences between the sexes are minimal - in the 15-19 year-old age bracket, there are 26% of women smokers and 31% of men, while in the 20-29 group, the figures are 48% for women and 51% for men.

The number of smokers culminates in the 30-39 year-old group of men and the 20-29 year-old group of women.

Proportion of cigarette smokers in each age group

	Men	**Women**
. 15-19	31%	26%
. 20-29	51%	48%
. 30-39	53%	38%
. 40-49	45%	27%
. 50-59	39%	19%
. 60-69	30%	14%
. 70 & over	26%	7%
All	**41%**	**29%**

(See Graph 3.2.).

Although there is not a great deal of previous data that are comparable here, it is possible to look at trends in tobacco consumption over 24 years in six of the countries of the Community* (see Table 3.3.). The general trend is for the number of smokers to go down, but the decrease can in fact be entirely attributed to the male population, as in all countries other then the United Kingdom, the proportion of women smokers is on the increase.

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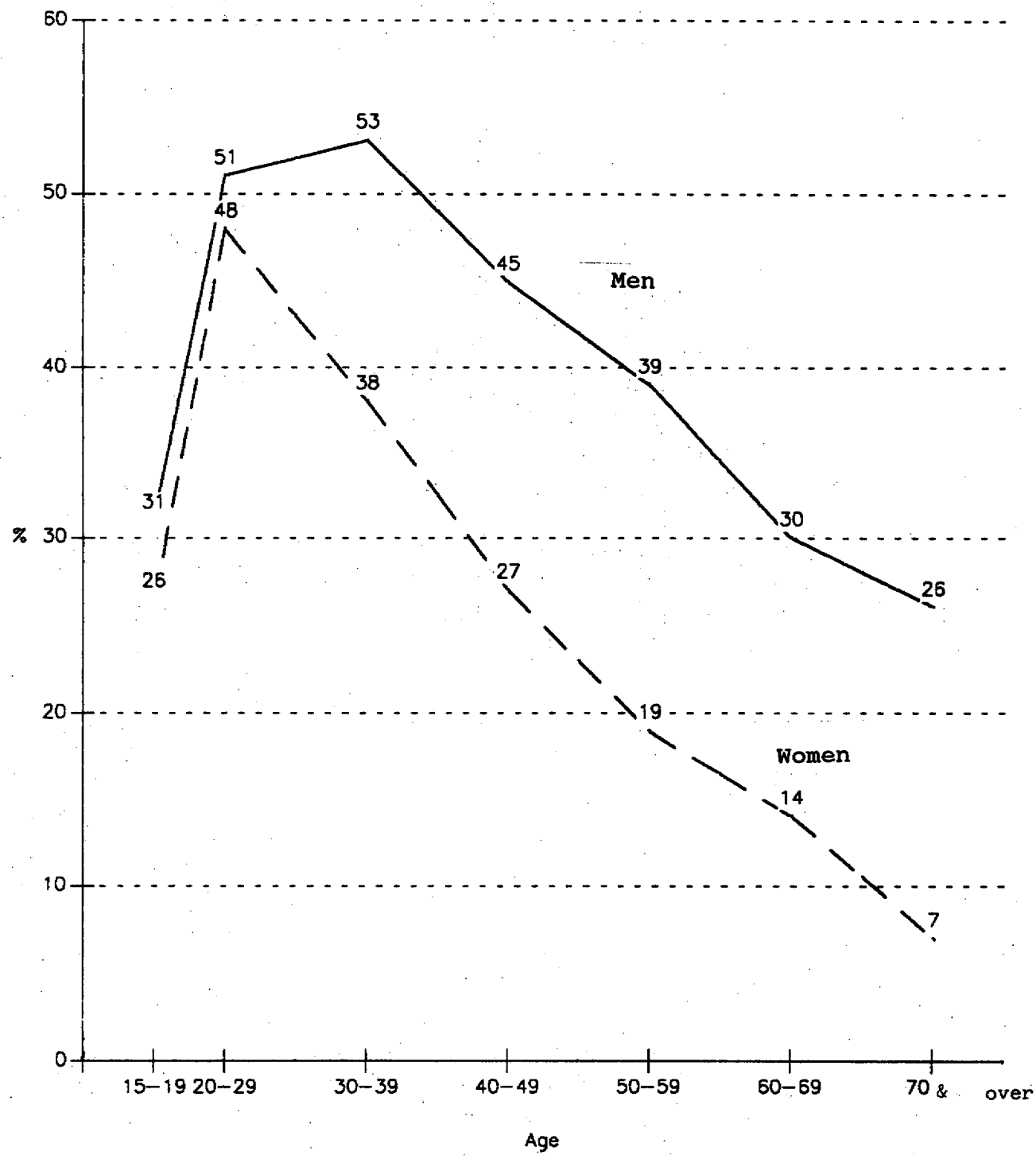
* The 1963 results set out here come from the "Products and People" survey, The Reader's Digest Association, London, 1963 - Survey in Belgium, Germany, France, Italy, the Netherlands and the United Kingdom.

GRAPH 3.2.

Proportion of cigarette smokers in the population, by sex and age



Smokers and non-smokers

	Non-Smokers			Smokers					
	Have never smoked (1)	Ex-smokers (2)	TOTAL (1)+ (2)	TOTAL (3)+ (4)	Pipe or cigars (3)	Cigar-ettes (4)	Light smokers	Average smokers	Heavy smokers
WHOLE COMMUNITY	44	19	63	37	3	35	9	20	5
Country : Belgique	51	17	68	32	3	30	8	16	5
Danmark	35	19	54	46	9	38	11	26	1
Deutschland	46	18	64	36	4	32	5	21	6
Ellas	46	11	57	43	1	42	8	19	15
Espana	48	11	59	41	3	39	11	19	7
France	40	22	62	38	3	36	13	19	4
Ireland	48	19	67	33	2	31	6	21	4
Italia	47	20	67	33	1	33	13	17	3
Luxembourg	49	16	65	35	3	32	8	17	7
Nederland	34	22	56	44	4	41	11	24	5
Portugal	56	11	67	33	*	32	6	21	5
United Kingdom	39	24	63	37	3	34	6	22	5
SEX : Male	30	25	55	45	6	41	8	25	7
Female	57	14	71	29	*	29	10	15	3
AGE : 15-24	51	9	60	40	*	40	13	23	4
25-39	36	16	52	48	3	46	11	27	7
40-54	44	19	63	37	4	34	8	19	7
55 ans & over	47	29	76	24	3	22	7	12	3
LEVEL OF EDUCATION									
Low	47	20	67	33	2	31	7	12	2
Average.....	42	18	60	40	2	39	10	23	5
High	41	20	61	39	5	36	12	18	5
HOUSEHOLD INCOME									
Low - -	49	18	67	33	2	32	9	17	5
-	42	20	62	38	3	36	9	22	4
+	41	21	62	38	4	35	9	20	6
High + + ...	40	20	60	40	4	37	8	22	6
OPINION LEADERSHIP									
Strong + + ...	32	22	54	46	6	42	9	26	8
+	40	22	62	38	3	36	10	20	6
-	45	19	64	36	3	35	9	21	4
Weak - -	55	15	70	30	2	29	9	16	4

NB (1) The total number of smokers may be slightly smaller than the sum cigar or pipe smokers + cigarette smokers, as some smokers consume tobacco in various forms.

(2) The total of light + average + heavy smokers is sometimes very slightly smaller than the total number of cigarette smokers, as some smokers failed to say what their consumption was.

* Less than 1%.

TABLE 3.2.

Trends in the proportion of smokers, 1963–87

	B	D	F	I	L	NL	GB
WHOLE POPULATION							
(21 & over)							
1963	45 %	41 %	39 %	39 %	47 %	57 %	51 %
1987	33	37	37	35	36	44	37
MALE POPULATION							
1963	80	70	66	50		82	67
1987	38	48	47	41		49	40
FEMALE POPULATION							
1963	15	16	15	27		32	38
1987	29	27	29	28		38	35
MEN + WOMEN							
. 21–29							
1963	47	42	48	41		61	52
1987	52	51	56	41		41	38
. 30–39							
1963	49	46	42	39		64	58
1987	36	57	42	49		56	40
. 40–54							
1963	48	39	40	38		59	56
1987	31	39	34	31		43	40
. 55 and over							
1963	40	39	33	37		48	44
1987	18	20	25	24		38	33
N							
1963	2006	1968	1957	2000	500	2004	2020
1987	909	874	896	933	251	878	872

The trends amongst the younger people are less clear cut. In the United Kingdom and the Netherlands, their consumption has dropped, while in Belgium, Germany and France it has risen. However, there is a clear drop in consumption in the 40+ group in all the countries. Ultimately, these trends suggest that the frequency of tobacco addiction has declined overall in these six countries at least and that the nature of the addiction has also changed and it is now young people and women who tend to smoke more often than they did 25 years ago.

Let us now look at smoking habits - or, more precisely, how smokers cut down and control their tobacco consumption.

Smokers' behaviour - how they cut down and control their habit

Various aspects of this process were dealt with in the survey:

- the notice the smoker takes of the tar content of cigarettes;
- the desire to change smoking habits so as to cut down tobacco intake or cut it out entirely;
- the frequency of refraining from smoking so as not to bother other people.

Question: Do you take notice of the tar content of your cigarettes?

	All cigarettes smokers
	%
. Yes	36
. No	64
TOTAL	100

(IF YES) Do you prefer to smoke cigarettes with a low tar content or not?

	All cigarette smokers taking notice of tar content
	%
. Yes	8
. No (or don't know)	28
TOTAL	36

Slightly more than one smoker out of three takes notice of the tar content of his or her cigarettes, although this translates into a deliberate choice of low-tar brands in only one out of 10. Yet one cigarette smoker in two, as we saw on page 42, knows that it is better to smoke low-tar cigarettes. This discrepancy between knowing about and actually applying preventive measures is not confined to this particular recommendation, although it is particularly flagrant in this case.

Question: (ALL SMOKERS) At the present time, do you wish to stop smoking, to cut down your consumption of tobacco, or not to change your smoking habits?

	All smokers
	%
. Wish to stop smoking	27
. Wish to cut down tobacco consumption	26
. Do not wish to change	45
. ?	2
TOTAL SMOKERS	100

Roughly one smoker out of every two (53%) wants to cut down, either by reducing consumption or even by giving up smoking entirely. The survey does not tell us whether these good intentions will actually turn into good deeds in the fairly near future, but it does show that a large proportion of smokers are currently addicted - not only knowing that the habit is harmful, but against their will (or, more precisely, against their deep-seated desires).

Question: Do you ever find yourself refraining from smoking in order not to annoy others?

	All smokers
	%
. Very often	14
. Often	25
. Sometimes	37
. Rarely	12
. Never	11
. ?	1
TOTAL	100

About four smokers out of 10 really are careful - i.e. they often or very often refrain from smoking so as not to annoy other people. And even though the proportion is smaller than the majority, it is nonetheless high and shows that smokers are fairly aware of the bother that their habit can cause.

The questions just presented show that the idea of cutting down their smoking in some way is not absent from the smokers' thoughts. The different behaviour described (being careful about tar content, thinking about cutting down and refraining from smoking in front of other people) is displayed by from a third to a half of all smokers. However, these proportions vary from one country to another (see Table 3.3.). They tend to be higher in countries where more people have experience of cancer around them (Denmark, France and the United Kingdom) and lower in countries where there are fewer. This is particularly true when it comes to refraining from smoking so as not to annoy other people.

But the national differences in the frequency of the various moves to cut down seem linked, above all, to a knowledge of the corresponding recommendations. So the more the recommendation not to smoke is known in a particular country, the more smokers there will be hoping to cut their tobacco consumption down or out (see Graph 3.3.). The notice taken of the tar concent of cigarettes varies in the same way, from one country to another, with knowledge of this recommendation and the extent to which people refrain from smoking so as not to both others with the recommendation not to annoy one's entourage. In other words, a knowledge of the rules of cancer prevention leads smokers to reflect on their behaviour - even if they do not change it as yet.

Lastly, a difference in behaviour according to the quantity of cigarettes consumed should be mentioned. Light smokers pay more attention to the tar content of their cigarettes and are quicker to refrain from smoking so as not to annoy other people, although they are less likely to stop or cut down. The heavy smokers, on the other hand, are more likely to think about cutting down

or stopping, although they tend less to moderate their behaviour - i.e. to watch the tar content of their cigarettes or to refrain from smoking for the sake of other people - than the rest. Briefly, then, the consumer behaviour of heavy smokers is more accentuated in qualitative terms (less attention paid to tar and greater problems with refraining), but not so easy to put up with (as more of them want to cut down without immediately doing so).

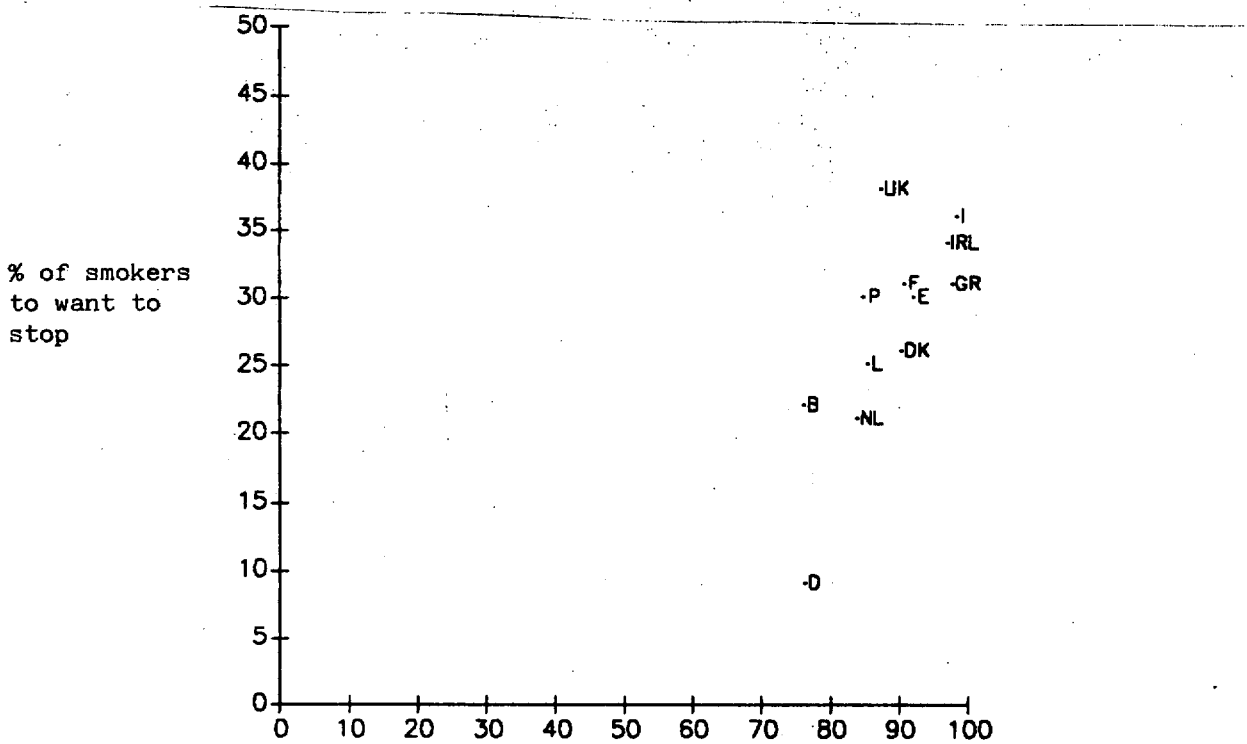
TABLE 3.3.

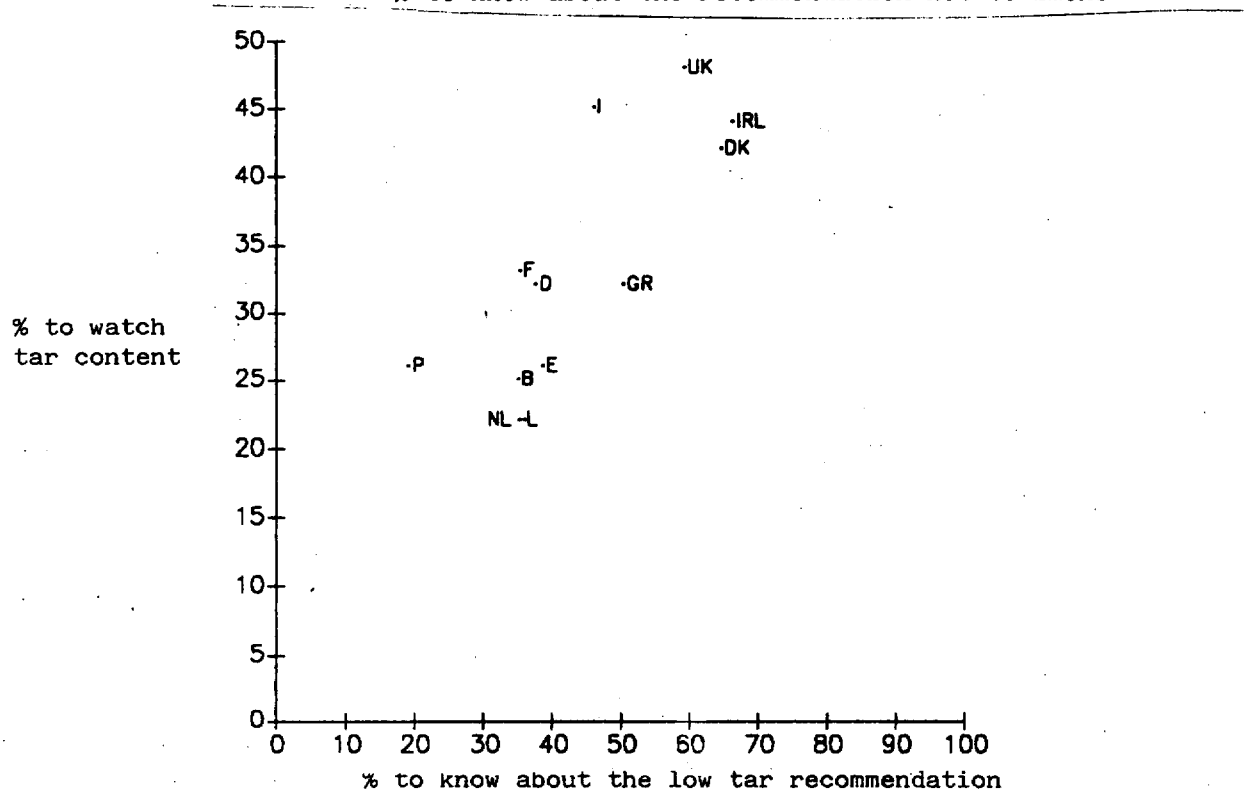
Changes in smoking habits, by country and quantity consumed

	Pay attention to tar content	Would like to cut down	Refrain from smoking often or very often
ALL SMOKERS	36 %	53 %	39 %
COUNTRY			
Belgique	25	52	33
Danmark	42	49	45
Deutschland	32	38	17
Ellas	32	60	52
Espana	26	55	28
France	33	57	60
Ireland	44	60	25
Italia	45	63	41
Luxembourg	22	55	45
Nederland	22	44	46
Portugal	26	63	31
United Kingdom	48	59	47
Sex			
Male	32	53	38
Female.....	41	54	42
Type of smoker			
Light	40	43	49
Average	36	60	37
Heavy	29	60	30

GRAPH 3.3.

Knowledge of recommendations about tobacco and smokers' application of them





The smoker's environment

This was approached via two questions. They dealt with the presence of smokers in the immediate entourage and the degree of annoyance generated by other people's cigarettes and they were put to all subjects.

Question: Are there regular smokers among the people you usually find yourself in the company of? If so, where?

	All
	%
. At home	39
. At work	28
. Elsewhere	37
. Do not find oneself among regular smokers	27
. ?	1
TOTAL	*

Almost three quarters of Europeans (72%) have regular smokers in their immediate entourage, but only four out of 10 have them at home. This shows to what extent social life increases the probability of being in the regular company of a smoker. The proportion is higher in Denmark, where it is close to nine out of 10, and Spain, where it is more than eight out of 10, but, outside these two cases, the national differences are not very large (see Table 3.4.).

Various features of the social life seem to have an influence on the presence of regular smokers in the immediate entourage. Women seem to be surrounded by smokers less often, but this difference between them and men is mainly due to the fact that, since they are less professionally active, they do not come across smokers at work so often.

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* Total greater than 100, as some people may have smokers around them in various places.

TABLE 3.4.

Presence of regular smokers in the immediate environment

		At home	At work	Elsewhere	Total number of smokers in entourage (*)
		%	%	%	%
TOTAL COMMUNITY		**39**	**28**	**37**	**72**
COUNTRY :	Belgique	39	35	35	73
	Danmark	48	51	48	89
	Deutschland	40	32	45	72
	Ellas	43	23	9	66
	Espana	46	27	50	83
	France	39	26	33	68
	Ireland	24	19	44	72
	Italia	38	24	21	67
	Luxembourg	34	36	31	73
	Nederland	43	26	27	71
	Portugal	28	30	50	76
	United Kingdom	36	30	43	73
SEX :	Male	36	39	41	77
	Female	43	18	33	68
AGE :	15-24	52	27	51	84
	25-39	45	43	38	81
	40-54	39	37	33	74
	55 & over	26	8	30	53
LEVEL OF EDUCATION					
	Low	37	20	34	67
	Average	44	32	40	76
	High	35	41	39	76
HOUSEHOLD INCOME					
	Low - -	32	13	38	61
	-	40	38	36	72
	+	40	35	34	75
	High + +	43	43	39	78
OPINION LEADERSHIP					
	Strong + +	39	17	29	65
	+	40	29	38	72
	-	39	32	40	75
	Weak - -	41	40	40	78

* Total less than the sum of the three columns, as each individual may have smokers around him/here in several places.

The presence of smokers in the entourage decreases with age and goes up with level of income, opinion leadership and, to a lesser extent, level of education.

The presence of smokers in the entourage appears, in fact, as a very important factor when it comes to addiction to tobacco, as people with smokers around them are more inclined themselves to smoke.

		Smokers in the entourage		
		Yes	**No**	**All**
		%	**%**	**%**
Smoke:	Yes	44	28	37
	No	55	72	62
	?	1	-	1
	TOTAL	100	100	100

Question: Does the smoke made by other people ever annoy you?

	All
	%
. A lot	32
. A little	30
. Not at all	37
?	1
TOTAL	100

Almost two thirds of Europeans (62%) say they are bothered by other people's smoke. Almost eight out of 10 non-smokers are annoyed and, although this proportion drops a lot amongst the women, it is still fairly high, particularly amongst light smokers (where it is almost one out of two).

Degree of annoyance caused by other people's smoke, by extent of tobacco consumption

	Have never smoked	Ex-smokers	Light smokers	Average smokers	Heavy smokers	TOTAL
	%	%	%	%	%	%
Are annoyed:						
. A lot	49	38	16	7	6	32
. A little	33	34	32	23	18	30
. Not at all	17	27	52	69	76	37
. ?	1	1	-	1	-	1
TOTAL	100	100	100	100	100	100

The British and the Greeks are the most commonly upset by other people's smoke, as are women and the highly educated. However, the factors responsible for the variation in the frequency of smokers in the entourage do not have such a clear effect on the annoyance caused by smoke.

TABLE 3.5.

Annoyed by other people's smoke

	A lot	A little	Not at all	?	TOTAL
	%	%	%	%	%
WHOLE COMMUNITY	**32**	**30**	**37**	**1**	**100**
: Belgique.....	25	30	44	1	100
Danmark.....	23	34	42	1	100
Deutschland.....	22	35	42	1	100
Ellas.....	42	30	28	-	100
Espana.....	30	29	40	1	100
France.....	32	28	39	1	100
Ireland.....	24	31	44	1	100
Italia.....	34	31	34	1	100
Luxembourg.....	32	27	40	1	100
Nederland.....	30	33	36	1	100
Portugal.....	32	33	34	1	100
United Kingdom.....	44	25	31	-	100
SEX : Male	27	28	44	1	100
Female.....	37	32	31	-	100
AGE : 15-24	30	32	36	2	100
25-39	30	32	38	-	100
40-54	33	29	38	-	100
55 & over	35	28	37	-	100
LEVEL OF EDUCATION					
Low	32	28	39	1	100
Average.....	30	31	38	1	100
High.....	36	34	30	-	100
HOUSEHOLD INCOME					
Low - -	33	26	39	2	100
-	31	31	38	-	100
+	33	31	35	1	100
High + + ...	33	30	36	1	100
OPINION LEADERSHIP					
Strong + + ...	36	26	38	-	100
+	29	34	36	1	100
-	34	29	37	-	100
Weak - -	32	28	39	1	100

3.2. Anti-smoking measures

The support for five anti-smoking measures was tested in our survey.

Quesion: Some countries have adopted laws to combat smoking in order to reduce the frequency of cancer. For each of the measures I am going to mention to you, can you tell me if you would approve or disapprove of them being enforced in (your country)?

	Would approve %	Would disapprove %	? %	Total %
. A very large increase of taxes on tobacco, part of which would be devoted to fighting cancer	71	24	5	100
. The banning of all advertising of any kind for tobacco	73	21	6	100
. Forbidding the sale of tobacco to young people under 16	84	12	4	100
. Banning of duty-free sales of tobacco at seaports, airports or in aircraft and ships	54	35	11	100
. Banning of smoking in public places, such as theatres, cinemas, public transport, restaurants, post offices etc	77	19	4	100

There is massive support for all these measures, with, however, some reticence as to the banning of duty-free tobacco in certain places.

The differences from one country to another are fairly sharp and, to a certain extent, systematic, regardless of the measure (see Table 3.6.). Denmark, for example, is almost always the least favourable, while Italy and France support the various measures even more than the others.

The tendency for any given country to approve the various measures to a greater or lesser extent appears to be fairly closed tied up with the proportion of people who have regular smokers around them, as it is with the knowledge of the recommendation not to smoke (see Graph 3.4.).

Denmark's particular position is easier to understand - Danes, whether they smoke or not, are the most likely to have smokers around them and they both express greater tolerance to the smoke and most often disapprove of the anti-smoking measures listed. The relations illustrated on the graph show, once again, the influence of both the social environment and the knowledge of certain rules relating to tobacco.

In addition to these general tendencies, there are also particular reasons in particular countries for being in favour of one or other of the measures.

For example, there is less support for higher tax in countries where taxation (and the price the consumer pays, therefore) is already high - as in Denmark and Germany. Another example is that, although the support for banning sales to the under-16s is particularly strong in the United Kingdom and Ireland, it is no doubt because these two countries already have legislation to protect their young people. Lastly, the opposition of a large minority or even a majority of Danes to certain legal bans may reflect a (more marked than elsewhere) concern with individual liberty - i.e. in the case in point, recognizing that everyone has the right to make a free choice. It is clear that, in this country particularly, the emphasis should go on the smoker's responsibility towards the non-smoker and on the responsibility of society as a whole.

Generally speaking, approval of the anti-smoking measures varies, above all, with sex and age. Women and the over-55s are more in favour (see Table 3.6.). No doubt this is primarily due to the effect of the degrees of tobacco addiction. Smokers are fairly naturally more inclined to oppose the various measures - particularly if they are heavier smokers. However, their opposition has its nuances. Light, average and heavy smokers agree that cigarettes should not be sold to the under-16s almost as often as the non-smokers do.

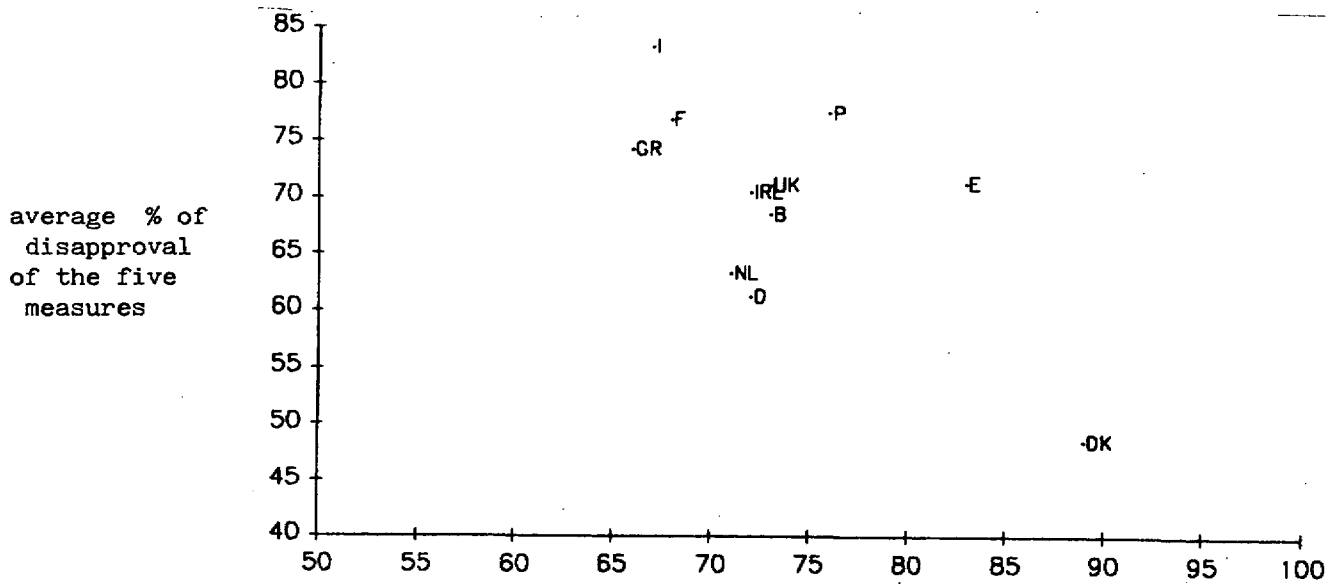
Heavy smokers, however, stand out from non-smokers when it comes to putting up the taxes, banning smoking in public places and banning duty-free sales in some places.

Approval of the various anti-smoking measures, by extent of tobacco consumption

	Non-smokers	Light smokers	Average smokers	Heavy smokers	All smokers	Whole Population
	%	%	%	%	%	%
. Increase texes	82	68	51	38	54	71
. Ban advertising	78	69	65	56	65	73
. Ban sales to the under-16s	86	77	81	78	80	84
. Ban duty-frees	63	46	39	33	40	54
. Ban smoking in public places	84	75	63	51	65	76

GRAPH 3.4.

Tendency to approve of the various anti-smoking measures



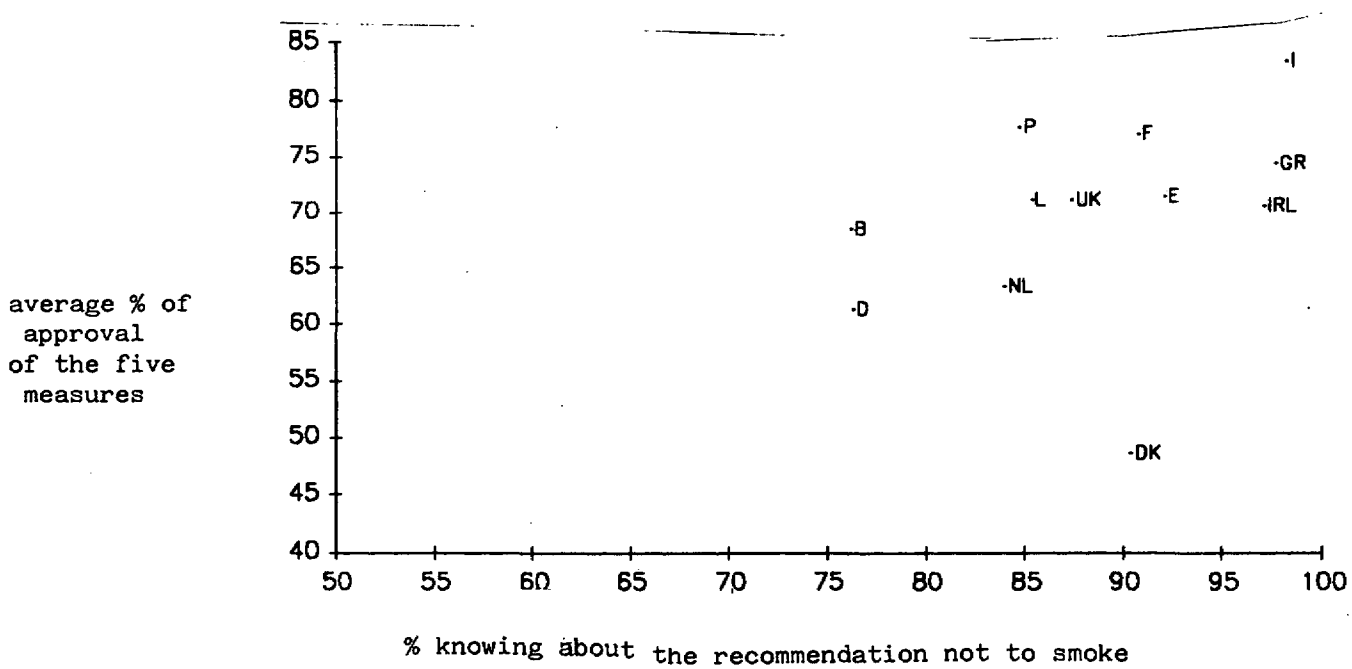


TABLE 3.6.

Opinions on the anti-smoking measures*

	Increase taxes			Ban advertising			Ban sales to the under-16s			Ban duty-free sales			Ban smoking in public places		
	+	–	?	+	–	?	+	–	?	+	–	?	+	–	?
WHOLE COMMUNITY	71	24	5	73	21	6	84	12	4	54	35	11	76	19	4
COUNTRY : Belgique.....	68	28	4	69	28	3	79	16	5	52	38	10	74	20	6
Danmark.....	54	35	11	54	38	8	42	50	8	25	64	11	67	26	7
Deutschland.....	59	34	7	67	34	9	80	13	7	44	46	10	56	36	8
Ellas.....	71	25	4	79	16	5	79	17	4	64	28	8	78	18	4
Espana.....	69	24	7	69	21	10	86	10	4	54	26	20	78	16	1
France.....	82	16	2	75	21	4	78	19	3	58	31	11	91	8	1
Ireland.....	66	28	6	78	16	5	93	5	2	46	45	9	69	26	5
Italia.....	82	15	3	84	12	4	86	10	4	71	19	10	93	5	2
Luxembourg.....	67	27	6	75	13	12	86	9	5	62	19	19	65	28	7
Nederland.....	67	28	5	58	34	8	70	24	6	52	39	9	69	24	7
Portugal.....	75	16	9	77	12	11	89	5	6	67	19	14	82	10	8
United Kingdom.....	68	28	4	74	21	5	97	3	1	44	49	7	72	26	2
SEX :															
Male	67	29	4	69	24	7	81	16	3	50	41	9	74	22	6
Female.....	75	19	6	76	17	7	87	9	4	57	30	13	79	16	5
AGE :															
15-24	68	27	5	64	28	8	76	20	4	45	44	11	71	24	5
25-39	69	27	4	73	22	5	81	14	5	50	41	9	75	21	4
40-54	71	25	4	76	19	5	86	11	3	57	33	10	76	21	3
55 & over	75	19	6	76	16	8	89	7	4	62	26	12	82	13	5
LEVEL OF EDUCATION															
Low	72	23	5	75	18	7	88	8	4	59	29	12	78	17	5
Average.....	69	26	5	69	25	6	81	15	14	49	42	9	74	22	4
High.....	72	24	4	76	20	4	77	19	4	52	38	10	78	19	3
HOUSEHOLD INCOME															
Low – –	72	22	6	73	19	8	87	8	5	58	29	13	79	15	6
–	71	25	4	74	20	6	85	11	4	57	33	10	77	19	4
+	75	22	3	75	20	5	82	15	3	53	38	9	78	19	3
High + + ...	69	27	4	74	21	5	82	16	2	51	40	9	76	20	4
OPINION LEADERSHIP															
Strong + + ...	68	30	2	76	20	4	79	18	3	53	40	7	73	24	3
+	71	24	5	73	21	6	84	12	4	53	38	10	77	19	4
–	71	25	4	73	22	5	84	13	3	53	37	10	77	19	4
Weak – –	72	20	8	71	19	10	84	10	6	58	27	15	76	18	6

CONCLUSION

One of the characteristics of cancer is, to a very large extent, being a disease linked to the life-style of the individual. The major interest of this survey is no doubt that it shows, through a number of facts and opinions, the importance of the life-style when it comes to understanding the attitudes and behaviour both to health problems and cancer prevention and to tobacco and the anti-smoking campaign.

Let us start with health. The Europeans' interest in health issues in general - i.e. not directly with their own health - varies considerably with country and socio-demographic category. This interest, associated with various types of health behaviour (not smoking and weight watching, for example), shows that the European population contains a (nationally and socio-demographically typed) sub-group which is concerned with health issues and therefore appears to be the best recipient of information and education campaigns. The difficulty of such campaigns now emerges as also reaching another target - which is less sensitive to health issues yet at greater risk of cancer.

The public's awareness of these problems varies considerably from one country to another. There seem to be objective causes for this - the country's health development, for example, certainly has an influence on the subjective evaluation of the state of health of the people as well as on the knowledge of people with cancer around one. In other words, countries with a higher level of health development are more concerned by public health issues. But these objective causes are not the whole explanation of national differences, so we are forced to look at the effect of other variables.

Europeans in general are fairly confident in preventive measures and they also appear to be fairly well informed about certain causes of cancer. Yet they are far from applying what they know are sound rules of prevention. This holds good for both tobacco and alcohol and screening and diet.

Why is there this discrepancy between knowing and doing? First of all, there is the distance between the individual and the recommendations on prevention. Although these recommendations are broadcast widely, through both national campaigns and frequent mention in the media, they do not always seem very credible. A majority of Europeans in fact doubts that many cancers can be cured and the disease is seen as a kind of fate.

But, above all, people may decline to apply the recommendations because following the attendant rules of health may be a threat to a large number of habits and even to a particular life-style. Tobacco gives us a clear illustration of this. Tobacco is a means of identification and of belonging in society. Smokers tend to have other smokers round them and, conversely, non-smokers tend to have non-smokers round them. This grouping together of each population is tied both to social factors (sex, age and some kinds of professional activity) and to interpersonal preferences. Ultimately, choosing whether or not to follow the recommendations is choosing a way of life.

The development of smoking amongst young women could thus be interpreted as one of the signs of the trend in behaviour, roles and life-styles. So information campaigns for young women and girls should insist on the idea that tobacco addiction is not necessarily tied to the role and image of the modern woman.

There is apparently little antagonism between the social groups with different habits. Smokers and non-smokers are on good terms, in spite of the fact that the latter say they are often bothered by the smoke emitted by the former. However, it emerges fairly clearly that cancer prevention has to be socially managed. It is well-received, even, in the anti-smoking campaign, but its favourable reception by the smokers only relates to one or two aspects - the banning of sales to the under-16s, the banning of advertising and the banning of smoking in public places.

In other words, the measures recommended by this anti-smoking campaign are only really accepted by the smokers if they do not make too much direct demand on their pocket (tax increases) or their acquired rights (duty-free sales). This holds good, in fact, for the whole field of prevention. If it is to be accepted, then it has to take account of the fact that it is going to threaten entrenched habits and therefore try and show that the cost of change to the minority which has to change its behaviour is smaller than the cost of non-change to society as a whole.

ANNEXES

1. Technical data about the survey
2. Socio-demographic variables used in the analysis
3. Questionnaire

INSTITUTS CHARGES DU SONDAGE ET SPECIALISTES RESPONSABLES

INSTITUTES WHICH CARRIED OUT THE SURVEY AND EXPERTS IN CHARGE

BELGIQUE/BELGIE	DIMARSO N.V. 78 Boulevard Lambermont B-1030 - BRUXELLES	Patrick JANSSENS	Tél. 322.215.19.30. Télex 046.64577 Telefax 322.218.00.99
DANMARK	GALLUP MARKEDSANALYSE A.S. Gammel Vartovvej 6, DK-2900 HELLERUP, COPENHAGEN	Asger SCHULTZ Rolf RANDRUP	Tél. 451.29.88.00 Télex 055.15180 Telefax 451.18.24.66
DEUTSCHLAND	EMNID-INSTITUT GmbH Bodelschwinghstrasse 23-25a D-4800 BIELEFELD 1	Walter TACKE Klaus-Peter SCHOEPPNER Franz KILZER	Tél. 49.521.260.010 Télex 041.932833 Telefax 49.521.260.01.55
ELLAS	ICAP HELLAS S.A. 64 Queen Sophia Avenue GR-115 28 ATHENS	Anthony LYKIARDOPOULOS Tilemachos DIB	Tél. 301.722.56.51 Télex 0601.215736 Telefax 301.722.02.55
ESPANA	INSTITUTO DE INVESTIGACION GALLUP Pº de la Castellana, 72-1º E-280046 MADRID	Jorge J.MIQUEL CALATAYUD Jaime MIQUEL ADRADA Luis PAMBLANCO	Tél. 341.262.62.54 Télex 052.87804 Telefax 410.37.96
FRANCE	INSTITUT DE SONDAGES LAVIALLE 6-8 Rue du 4 Septembre F-92130 ISSY-LES-MOULINEAUX	Albert LAVIALLE Florence FABRE	Tél.331.45.54.97.11 Télex 205165 Telefax 331.45.54.74.47
IRELAND	IRISH MARKETING SURVEYS Ltd 19-20 Upper Pembroke Street IRL-DUBLIN 2	Charles COYLE Mary BOYCE	Tél. 353.176.11.96 Télex 0500.30617 Telefax 353.176.08.77
ITALIA	ISTITUTO PER LE RICERCHE STATISTICHE E L'ANALISI DELL'OPINIONE PUBBLICA (DOXA) Via Panizza 7, I-20144 MILANO	Ennio SALAMON Alfonso del RE	Tél. 392.48.19.33.20 Télex 321.101 Telefax 392.48.19.32.86
LUXEMBOURG	INSTITUT LUXEMBOURGEOIS DE RECHERCHES SOCIALES (ILRES) 6, rue du Marché-aux-Herbes GD- 1728 LUXEMBOURG	Louis MEVIS Edmée MEVIS Charles MARGUE	Tél. 352.47.50.21. Télex 0402.60468 Telefax -
NEDERLAND	NEDERLANDS INSTITUUT VOOR DE PUBLIEKE OPINIE (NIPO) B.V. Westerdokhuis, Barentzplein 7 NL-1013 AMSTERDAM	Arnold MEIJTLANDT Martin JONKER	Tél. 31.20.24.88.44 Télex 044.14614 Telefax 31.20.26.43.75
PORTUGAL	NORMA - Sociedade de Estudos para o Desenvolvimento de Empresas, S.A.R.L. Rua Marqués de Fronteira, 76 P-1000 LISBOA	J.A. VIDAL de OLIVEIRA	Tél. 351.1.76.76.04 Télex 0404.12604 Telefax -
UNITED KINGDOM	SOCIAL SURVEYS (GALLUP POLL) 202 Finchley Road, UK - LONDON NW3 6BL	Norman WEBB Robert WYBROW	Tél. 441.794.04.61 Télex : 051.261712 Telefax : 441.431.02.52

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Toutes les données relatives aux Euro-Baromètres sont déposées aux "Belgian Archives for the Social Sciences", (1, place Montequieu, B-1348 Louvain-la-Neuve). Elles sont tenues à la disposition des organismes membres du European Consortium for Political Research (Essex), du Inter-University Consortium for Political and Social Research (Michigan) et des chercheurs justifiant d'un intérêt de recherche.

All Euro-Barometer data are stored at the Belgian Archives for the Social Sciences (1, Place Montesquieu, B-1348 Louvain-La-Neuve). They are at the disposal of all institutes members of the European Consortium for Political Research (Essex), of the Inter-University Consortium for Political and Social Research (Michigan) and all those interested in social science research.

Pour tous renseignements sur les études d'opinion publique faites à l'initiative de la Commission des Communautés européennes, écrire à Karlheinz REIF, "Sondages, recherches, analyses, 200, rue de la Loi, B-1049 Bruxelles.

For all information regarding opinion surveys carried out for the Commission of the European Communities, please write to Karlheinz REIF, "Surveys, Researches, Analyses", 200 rue de la Loi, B-1049 Brussels.

(*) Les douze instituts chargés de ces sondages sont représentés par la société THE EUROPEAN OMNIBUS SURVEYS s.c., dont le comité de direction comprend : Jan Stapel (NIPO, Amsterdam), Norman Webb (GALLUP INTERNATIONAL, Londres), Hélène Riffault et Jean-François Tchernia (FAITS & OPINIONS, Paris) et Nicole Jamar (THE EUROPEAN OMNIBUS SURVEYS, Bruxelles).

The twelve institutes which carried out these surveys are represented by THE EUROPEAN OMNIBUS SURVEYS s.c., of which the board members are : Jan Stapel (NIPO, Amsterdam), Norman Webb (GALLUP INTERNATIONAL, London), Hélène Riffault and Jean-François Tchernia (FAITS ET OPINIONS, Paris) and Nicole Jamar (THE EUROPEAN OMNIBUS SURVEYS, Brussels).

(**) Le sondage en Northern Ireland est fait en collaboration par Irish Marketing Surveys et Social Surveys (Gallup Poll).

The Northern Ireland survey is conducted jointly by Irish Marketing Surveys and Social Surveys (Gallup Poll).

ECHANTILLONNAGE/SAMPLING

L'objectif de la méthode d'échantillonnage est de couvrir de façon représentative la totalité de la population âgée de 15 ans et plus, des douze pays de la Communauté élargie. L'échantillonnage de chaque pays est constitué à deux niveaux :

The sample bas been designed to be representative of the total population aged 15 years and over of the twelve countries of the enlarged Community. In each country a two stage sampling method is used :

1°) Régions et localités d'enquête

1°) Geographical distribution

L'enquête a lieu sur l'ensemble du territoire des douze pays, soit 138 régions. (Voir liste ci-jointe en A.4).

The survey covers the whole territory of the twelve countries i.e. 138 regions. (See attached list A.4).

Chaque pays a constitué aléatoirement un échantillon-maître de localités d'enquête, de telle sorte que toutes les catégories d'habitat soient représentées proportionnellement à leurs populations respectives.

In each country a random selection of sampling points is made in such a way that all types of area (urban, rural, etc..) are represented in proportion to their populations.

Au total, les interviews ont lieu dans environ 1.350 points d'enquête.

The interviews are distributed in more or less 1.350 sampling points.

2°) Choix des personnes interrogées

Les personnes interrogées sont toujours différentes d'une enquête à l'autre. L'échantillon-maître aléatoire évoqué ci-dessus indique le nombre de personnes à interroger à chaque point d'enquête. Au stade suivant, les personnes à interroger sont désignées :

- soit par un tirage au sort sur liste dans les pays où on peut avoir accès à des listes exhaustives d'individus ou de foyers : Danemark, Luxembourg, Pays-Bas. ;
- soit par échantillonnage stratifié sur la base des statistiques de recensement, l'échantillon étant construit à partir des critères de sexe, âge et profession : Belgique, France, Italie, Royaume-Uni, Irlande ;
- soit par une méthode combinant les deux précédentes (cheminement systématique) : Allemagne, Grèce, Espagne, Portugal.

2°) Choice of respondents

For each survey different individuals are interviewed in the master sample of sampling point described above. Within these sampling points the individuals to be interviewed are chosen :

- either at random from the population or electoral lists in those countries where access to suitable lists of individuals or households is possible : Denmark, Luxembourg, Netherlands ;
- or by quota sampling. In these cases the quotas are established by sex, age and occupation on the basis of census data : this system is used in Belgium, France, Italy, United-Kingdom, Ireland ;
- or by a method combining the two precedent ones ("random route") : Germany, Greece, Spain, Portugal.

	Population (1)			Echantillons/ Samples (2) (Euro-Baromètre n° 28)	Dates (Euro-Baromètre n° 28)
	Milliers /Thousands	% CE/EC 10	% CE/EC 12		
B	7.924	3.64	3.12	1.005	08/10 au 16/10/1987
DK	4.133	1.90	1.62	1.008	26/10 au 20/11/1987
D	51.466	23.62	20.26	957	21/10 au 19/11/1987
GR	7.715	3.54	3.04	1.000	12/10 au 10/11/1987
F	42.851	19.67	16.87	999	19/10 au 19/11/1987
IRL	2.455	1.13	.97	998	20/10 au 04/11/1987
I	44.438	20.39	17.49	1.032	23/10 au 05/11/1987
L	300	.14	.12	302	15/10 au 05/11/1987
NL	11.400	5.23	4.49	965	28/10 au 05/11/1987
UK	45.207	20.75	17.79	1.309	10/10 au 08/11/1987
CE/EC 10	217.889	100.00	85.77	9.575	08/10 au 20/11/1987
E	28.854	-	11.36	1.019	05/10 au 23/10/1987
P	7.314	-	2.88	1.000	26/10 au 24/11/1987
CE/EC 12	254.057	-	100.00	11.594	05/10 au 24/11/1987

Il est rappelé que les résultats obtenus par sondage sont des estimations dont le degré de certitude et de précision dépend, toutes choses égales d'ailleurs, du nombre des individus constituant l'échantillon. Avec des échantillons de l'ordre de 1.000, on admet généralement qu'une différence inférieure à cinq pour cent entre deux pourcentages est au-dessous du niveau acceptable de confiance.

Readers are reminded that sample survey results are estimations, the degree of certainty and precision of which, everything being kept equal rests upon the number of cases. With samples of about 1.000, it is generally admitted that a percentage difference of less than five per cent is below the acceptable level of confidence.

(1) 15 ans et plus. / 15 years and over.
(2) Nombre d'interviews. / Number of interviews.

REGIONS D'ENQUETES / GEOGRAPHICAL DISTRIBUTION

BELGIQUE/BELGIE

Vlaams gewest
Région Wallonne
Bruxelles/Brussel
Antwerpen
Brabant
Hainaut
Liège
Limburg
Luxembourg
Namur
Oost-Vlaanderen
West-Vlaanderen

BUNDESREPUBLIK DEUTSCHLAND

Schleswig-Holstein
Hamburg
Niersersachsen
Braunschweig
Hannover
Lüneburg
Weser-Ems
Bremen
Nordrhein-Westfalen
Düsseldorf
Köln
Münster
Detmold
Arnsberg
Hessen
Darmstadt
Kassel
Rheinland-Pfalz
Koblenz
Trier
Rheinhessen-Pfalz
Baden-Württemberg
Stuttgart
Karlsruhe
Freiburg
Tübingen
Bayern
Oberbayern
Niederbayern
Oberpfalz
Oberfranken
Mittelfranken
Unterfranken
Schwaben
Saarland
Berlin (West)

DANMARK

Jylland
Sjaelland
Fyn

FRANCE

Ile de France
Bassin parisien
Champagne-Ardennes
Picardie
Haute-Normandie
Centre
Basse-Normandie
Bourgogne
Nord-Pas de Calais
Est
Lorraine
Alsace
Franche-Comté
Ouest
Pays de la Loire
Bretagne
Poitou-Charentes
Sud-Ouest
Aquitaine
Midi-Pyrénées
Limousin
Centre-Est
Rhône-Alpes
Auvergne
Méditerranée
Languedoc-Roussillon
Provence-Alpes-Côte d'Azur
(Corse)

IRELAND

Donegal
North West
North East
West
Midlands
East
Mid West
South East
South West

ITALIA

Nord-Ovest
Piemonte
(Valle d'Aosta)
Liguria
Lombardia
Nord-Est
Trentino-Alto Adige
Veneto
Friuli-Venezia Giulia
Emilie-Romagne
Centro
Toscane
Umbria
Marche
Lazio
Campania
Abruzzi-Molise
Abruzzi
Molise
Sud
Puglia
Basilicata
Calabria
Sicilia
Sardegna

LUXEMBOURG (GRAND-DUCHE)

NEDERLAND

Noord-Nederland
Groningen
Friesland
Drenthe
Oost-Nederland
Overijssel
Gelderland
West-Nederland
Utrecht
Noord-Holland
Zuid-Holland
Zeeland
Zuid-Nederland
Noord-Brabant
LImburg

UNITED KINGDOM

North
Yorkshire and Humberside
East Midlands
East Anglia
South-East
South-West
West Midlands
North-West
Wales
Scotland
Northern Ireland

ELLAS

Kentriki Ellas kai
Evia
Peloponnissos
Ionioi Nissoi
Ipiros
Thessalia
Makedonia
Thraki
Nissoi Aigaiou
Kriti

ESPANA

Noreste
Levante
Sur
Centro
Noroeste
Norte

PORTUGAL

Grande Lisboa
Grande Porto
Litoral
Interior Norte
Interior Sul

173. Vous intéressez-vous aux informations sur la santé en écoutant des émissions médicales à la radio, à la télévision, ou en lisant des articles de presse sur la santé ?

1. Souvent
2. Parfois
3. Rarement
4. Jamais
0. ?

174/ Vous arrive-t-il souvent, parfois, rarement ou jamais de
180. faire l'une ou l'autre des choses suivantes ?

	Souvent	Parfois	Rarement	Jamais	Ne boit pas	?
174. Modérer votre consommation de boissons alcoolisées	1	2	3	4	5	0
175. Manger des légumes frais	1	2	3	4		0
176. Manger des fruits frais	1	2	3	4		0
177. Manger des aliments riches en fibres (pain complet, son, riz complet)	1	2	3	4		0
178. Consommer des aliments pauvres en graisses	1	2	3	4		0
179. Surveiller votre poids	1	2	3	4		0
180. Eviter les expositions brutales et prolongées au soleil	1	2	3	4		0

215. Parmi les situations suivantes quelle est celle qui correspond à votre cas ? (REPONSES MULTIPLES POSSIBLES EN 1 ET 2).

1. Vous fumez des cigarettes
2. Vous fumez le cigare, la pipe — PASSER A Q. 219
3. Vous vous êtes arrêté de fumer)
4. Vous n'avez jamais fumé — (PASSER A Q. 221
0. ?)

QUESTIONS 216 A 218 POSEES SEULEMENT AUX FUMEURS DE CIGARETTES

216. Vous fumez ... (MONTRER LA CARTE)

1. Moins de 5 cigarettes par jour
2. De 5 à 9 cigarettes
3. De 10 à 14 cigarettes
4. De 15 à 19 cigarettes
5. De 20 à 24 cigarettes
6. De 25 à 30 cigarettes
7. De 31 à 34 cigarettes
8. De 35 à 40 cigarettes
9. Plus de 40 cigarettes par jour
0. ?

217. Faites-vous attention à la teneur en goudron de vos cigarettes ?

1. Oui
2. Non
0. ?

218. SI OUI, fumez-vous de préférence des cigarettes à faible teneur en goudron ?

1. Oui
2. Non
0. ?

173. Are you interested in programmes on television or radio about health, or articles in the newspaper about health ? IF YES, do you listen to, watch, or read such articles or programmes ...

1. Often
2. Sometimes
3. Rarely
4. Never
0. ?

174/ Do you ever happen to carry out any of the following things ?
180. IF SO, do you do it often, sometimes, rarely or never ?

	Often	Sometimes	Rarely	Never	Abstainers	%
174. Cut down your consumption of alcoholic drinks	*1*	*2*	*3*	*4*	*5*	*0*
175. Eat fresh vegetables	*1*	*2*	*3*	*4*		*0*
176. Eat fresh fruits	*1*	*2*	*3*	*4*		*0*
177. Eat food rich in fibre (whole- meal bread, bran, brown rice)	*1*	*2*	*3*	*4*		*0*
178. Eat non-fatty foods	*1*	*2*	*3*	*4*		*0*
179. Watch your weight	*1*	*2*	*3*	*4*		*0*
180. Avoid intense or prolonged exposure to the sun	*1*	*2*	*3*	*4*		*0*

215. Which of the following things applies to yourself ? (MULTIPLE RESPONSES POSSIBLE BETWEEN 1 AND 2).

1. You smoke cigarettes
2. You smoke cigars or a pipe — GO TO Q. 219
3. You used to smoke but you have stopped)
4. You have never smoked — (GO TO Q. 221
0. ?)

QUESTIONS 216 TO 218 ASKED ONLY TO CIGARETTE SMOKERS

216. How many cigarettes do you smoke a day ? (SHOW CARD).

1. Less than 5
2. 5 to 9
3. 10 to 14
4. 15 to 19
5. 20 to 24
6. 25 to 30
7. 31 to 34
8. 35 to 40
9. More than 40
0. ?

217. Do you take notice of the tar content of your cigarettes ?

1. Yes
2. No
0. ?

218. IF YES, do you prefer to smoke cigarettes with a low-tar content or not ?

1. Yes
2. No
0. ?

QUESTIONS 219 ET 220 POSEES AUX FUMEURS (CIGARETTES ET AUTRES)

219. Actuellement avez-vous envie de vous arrêter de fumer, de diminuer votre consommation de tabac ou de ne rien changer à vos habitudes ?

1. Envie de vous arrêter de fumer
2. Envie de diminuer votre consommation de tabac
3. Envie de ne rien changer à vos habitudes
0. ?

220. Vous arrive-t-il de vous abstenir de fumer pour ne pas importuner les autres ?

1. Très souvent
2. Souvent
3. Parfois
4. Rarement
5. Jamais
0. ?

A TOUS

221. La fumée des autres vous incommode-t-elle ?

1. Beaucoup
2. Un peu
3. Pas du tout
0. ?

222. Y a-t-il des fumeurs réguliers dans votre entourage immédiat ? (REPONSES MULTIPLES POSSIBLES POUR 1,2,3). SI OUI, c'est chez vous, à votre travail ou ailleurs ?

1. Chez vous
2. A votre travail
3. Ailleurs
4. Pas de fumeurs dans l'entourage immédiat
0. ?

223/ 227. Certains pays ont adopté des mesures de lutte contre le tabagisme pour réduire la fréquence des cancers. Pour chacune des mesures que je vais vous citer, pouvez-vous me dire si vous approuveriez ou si vous désapprouveriez leur application (dans votre pays) ?

	Approuverait	Désapprouverait	?
223. L'augmentation importante des taxes sur le tabac dont une partie serait consacrée à la lutte contre le cancer	1	2	0
224. L'interdiction de toute forme de publicité concernant le tabac	1	2	0
225. L'interdiction de vente de tabac aux jeunes de moins de 16 ans	1	2	0
226. L'interdiction de vente de tabac hors taxe dans les ports, les aéroports, les avions ou les bateaux	1	2	0
227. L'interdiction de fumer dans les locaux publics (théatres, cinémas, transports, en commun, restaurants, bureaux de poste)	1	2	0

228. Dans l'ensemble, comment décririez-vous votre état de santé en ce moment ? Diriez-vous qu'il est ... (MONTRER LA CARTE)

1. Très bon
2. Bon
3. Acceptable
4. Plutôt mauvais
5. Très mauvais
0. ?

229. Vous est-il déjà arrivé d'être gravement malade ? SI OUI, pouvez-vous me dire le genre de maladie que vous avez eu ? (MONTRER LA CARTE, PLUSIEURS REPONSES POSSIBLES).

1. Maladie cardiaque
2. Diabète
3. Dépression nerveuse
4. Cancer
5. Autre (PRECISER)
6. N'a jamais été gravement malade
0. ?

QUESTIONS 219 AND 220 PUT TO SMOKERS OF CIGARETTES OR OTHER FORMS OF TOBACCO

219. At the present time, do you wish to stop smoking, to cut down your consumption of tobacco, or not to change your smoking habits ?

1. Wish to stop smoking
2. Wish to cut down tobacco consumption
3. Do not wish to change
0. ?

220. Do you ever find yourself refraining from smoking in order not to annoy others ?

1. Very often
2. Often
3. Sometimes
4. Rarely
5. Never
0. ?

TO ALL

221. Does the smoke made by other people ever annoy you ?

1. A lot
2. A little
3. Not at all
0. ?

222. Are there regular smokers among the people you usually find yourself in the company of ? IF SO, has this happened at home, where you work, or elsewhere ?

1. At home
2. At work
3. Elsewhere
4. Do not find oneself among regular smokers
0. ?

223/ 227. Some countries have adopted laws to combat smoking in order to reduce the frequency of cancer. For each of the measures I am going to mention to you, can you tell me if you would approve or disapprove of them being enforced in (your country) ?

	Would approve	Would disapprove	?
223. A very large increase of taxes on tobacco part of which would be devoted to fighting cancer	*1*	*2*	*0*
224. The banning of all advertising of any kind for tobacco	*1*	*2*	*0*
225. Forbidding the sale of tobacco to young people under 16	*1*	*2*	*0*
226. Banning of duty-free sales of tobacco at seaports, airports or in aircraft or ships	*1*	*2*	*0*
227. Banning of smoking in public places, such as theatres, cinemas, public transport, restaurants, post office etc	*1*	*2*	*0*

228. How would you describe your state of health in general now ? Would you say it is ... (SHOW CARD)

1. Very good
2. Good
3. Reasonable
4. Rather poor
5. Very poor
0. ?

229. Have you ever been seriously ill ? IF YES, could you tell me the type of illness you suffered from ? (SHOW CARD, MULTIPLE RESPONSES POSSIBLE).

1. Heart disease
2. Diabetes
3. Nervous depression
4. Cancer
5. Other (SPECIFY)
6. Have never been seriously ill
0. ?

Euro-Baromètre n° 27 -

230. A l'aide de cette liste pourriez-vous me dire quelles sont, à votre avis, les causes les plus fréquentes du cancer ? (PLUSIEURS REPONSES POSSIBLES. MONTRER LA CARTE).

1. L'hérédité
2. L'exercice de certaines professions
3. La pollution
4. Le tabac
5. L'alcool
6. Une consommation insuffisante de fruits et de légumes frais
7. Une consommation excessive de graisse
8. Les virus
9. Les problèmes psychologiques, le stress
X. La radioactivité
Y. L'exposition excessive au soleil
0. ?

231. A votre avis, est-il actuellement possible de diminuer les risques d'avoir certains cancers en adoptant une bonne hygiène de vie ?

1. Oui
2. Non
0. ?

232. Avez-vous déjà eu des examens médicaux de dépistage du cancer ?

1. Plusieurs fois
2. Une fois
3. Non
0. ?

233. A votre avis, les cancers peuvent-ils être prévenus ou évités ? (MONTRER LA CARTE).

1. Dans les trois quarts des cas
2. Dans la moitié des cas
3. Dans un quart des cas
4. Moins souvent
5. Jamais
0. ?

234/ Voici une liste de recommandations que des médecins ont mis
235. au point pour aider à diminuer les risques de cancer. Pouvez-vous lire ce message et me dire ce que vous en pensez en répondant aux questions que je vais vous poser ? (MONTRER LA CARTE).

234. Quelles sont les recommandations de prévention du cancer que vous connaissez déjà ? (PLUSIEURS REPONSES POSSIBLES)

235. Quelles sont les recommandations qui vous paraissent les plus difficiles à appliquer pour vous personnellement ? (MONTRER LA CARTE, PLUSIEURS REPONSES POSSIBLES)

ITEMS CORRESPONDANT à la CARTE 1	Q. 234	Q. 235
A	1	1
B	2	2
C	3	3
D	4	4
E	5	5
F	6	6
G	7	7
H	8	8
I	9	9
J	X	X
K	Y	Y
?	0	0

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230. With the help of this list, could you tell me what are, in your opinion, the most common causes of cancer ? (SHOW CARD, SEVERAL RESPONSES POSSIBLE).

1. Heredity
2. Working in certain trades or professions
3. Pollution
4. Tobacco
5. Alcohol
6. A diet lacking sufficient fresh fruits and vegetables
7. A diet with too much fatty food
8. Viruses
9. Psychological problems, stress
X. Radioactivity
Y. Excessive exposure to sunlight
0. ?

231. In your opinion, is it possible nowadays to reduce the risk of getting some kinds of cancer by following a healthy way of life ?

1. Yes
2. No
0. ?

232. Have you already had any medical examinations for screening of cancer ?

1. Several times
2. Once
3. No
0. ?

233. In your opinion, do you think cancer can be prevented or avoided . (SHOW CARD)

1. In three cases out of four
2. In half of cases
3. In one case out of four
4. Less often
5. Never
0. ?

234/ Here is a list of recommendations which doctors have prepared
235. to help reduce the risk of cancer. Could you read this and tell me what you think of it by replying to some questions I am going to put to you ? (SHOW CARD)

234. Which of these recommendations for the prevention of cancer did you know about already ? (SEVERAL RESPONSES POSSIBLE).

235. Are there any of these recommendations which appear to you to be the most difficult for you personnaly to carry out ? Which ones ? (SHOW CARD, SEVERAL RESPONSES POSSIBLE).

ITEMS REGARDING CARD 1	Q. 234	Q. 235
A	1	1
B	2	2
C	3	3
D	4	4
E	5	5
F	6	6
G	7	7
H	8	8
I	9	9
J	X	X
K	Y	Y
?	0	0

CARTE POUR QU. 234/235

Des cancers peuvent être évités.

A. Ne fumez pas

B. Si vous ne pouvez absolument pas vous en empêcher, utilisez des cigarettes à faible teneur en goudron

C. Et n'enfumez pas les autres

D. Modérez votre consommation de boissons alcoolisées

E. Consommez suffisamment de fruits et légumes frais

F. Consommez suffisamment de céréales riches en fibres

G. Ayez une alimentation pauvre en graisses

H. Evitez l'excès de poids

I. Evitez autant que possible les expositions brutales, intenses et prolongées au soleil, surtout chez les enfants, et surtout si vous n'y êtes pas habitué

Certains cancers peuvent être guéris s'ils sont détectés suffisamment tôt.

J. Consultez un médecin si vous constatez qu'un grain de beauté saigne ou change de forme ou de couleur

K. Consultez un médecin si gous constatez une grosseur inhabituelle ou un saignement anormal, une toux répétée ou un changement de voix persistant.

CARTE POUR QU. 236/237

(Femmes seulement)

Certains cancers peuvent être guéris s'ils sont détectés suffisamment tôt.

L. Faites pratiquer un frottis vaginal, à intervalle régulier de trois à cinq ans, dès l'âge de 20 à 30 ans.

M. Surveillez votre poitrine régulièrement

N. Si cela est possible, faites procéder à des mammographies (radiographies des seins) après l'âge de 50 ans.

Euro-Baromètre n° 27 -

QUESTIONS 236 ET 237 AUX FEMMES SEULEMENT

236/ Voici une liste de recommandations qui concernent seulement
237. les femmes (MONTRER LA CARTE).

236. Quelles sont les recommandations de prévention du cancer que vous connaissez déjà ? (PLUSIEURS REPONSES POSSIBLES).

237. Quelles sont les recommandations que vous appliquez actuellement ? (MONTRER LA CARTE, PLUSIEURS REPONSES POSSIBLES).

ITEMS CORRESPONDANT à la CARTE 2	Q. 236	Q. 237
L	1	1
M	2	2
N	3	3
?	0	0

A TOUS

238. Y a-t-il eu des cas de cancer parmi les gens qui vous sont très proches ?

1. Oui
2. Non
0. ?

239. SI OUI, c'était ... (MONTRER LA CARTE, PLUSIEURS REPONSES POSSIBLES).

1. Grand-père/grand-mère
2. Père/mère
3. Mari/femme
4. Fils/fille
5. Frère/soeur
6. Un autre membre de la famille
7. Un ami proche
8. Autre
9. Personne
0. ?

Euro-Barometer n° 27 -

QUESTIONS 236 AND 237 TO WOMEN ONLY

236/ Here is a list of recommendations which only apply to women.
237. (SHOW CARD)

236.. Which of these recommendations for the prevention of cancer did you know about already ? (SEVERAL RESPONSES POSSIBLE).

237. Which of these do you actually follow yourself ? (SHOW CARD. SEVERAL RESPONSES POSSIBLE).

ITEMS REGARDING CARD 2	*Q. 236*	*Q. 237*
L	*1*	*1*
M	*2*	*2*
N	*3*	*3*
?	*0*	*0*

TO ALL

238. Have there been any cases of cancer amongst your close friends or relatives ?

1. Yes
2. No
0. ?

239. IF YES, which ones of these ? (SHOW CARD, SEVERAL RESPONSES POSSIBLE)

1. Grandfather/mother
2. Father/mother
3. Husband/wife
4. Son/daughter
5. Brother/sister
6. Another member of the family
7. A close friend
8. Somebody else
9. Nobody
0. ?

CARD FOR 234/235

Cancer can be avoided

A Do not smoke

B If you cannot possibly avoid smoking, then smoke only cigarettes with a low tar content

C Do not smoke in the presence of others

D Reduce your consumption of alcoholic drinks

E Eat sufficient fresh fruits and vegetables

F Eat plenty of cereals with a high-fibre content

G Eat low-fat foods

H Avoid being or becoming overweight

I Avoid, as far as possible, sunburn and intense or prolonged exposure to the sun, especially for children or if you are not used to it

Certain cancers can be cured if they are detected early enough

J See a doctor if you notice any bleeding or a change in the size or colour of any mole or beauty spot

K See a doctor if you notice an unusual lump or abnormal bleeding, a persistent cough or persistent change in the voice

CARD FOR 236/ 237

ONLY FOR WOMEN

A number of cancers can be cured if they are detected early enough

L Above 20 - 30 years of age, have a regular cervical smear done every three to five years

M Check your breasts regularly

N If it is possible, undergo mammography (an x-ray of the breasts) from the age of 50 onwards.

ANNEX II

A. LEVEL OF EDUCATION

In view of the great diversity of school and university systems in the countries of the European Community and of the fact that the school systems which the older people went through were different from the ones there are today, the information on the level of education of subjects in the European surveys is gathered in the following way:

Question: At what age did you complete your full-time schooling?

The surveys are classified into three categories of level of education (according to the length of time spent at school):

- low level — left school at 15 or earlier;
- average level — left school at 16, 17, 18 or 19;
- high level — left at 20 or over.

B. LEVEL OF INCOME

Question: We should like to analyse the results of this survey according to the level of income of the people who replied. Here is a scale of incomes. We should like to know into which category your household falls in the light of the wages, pensions, income or other resources of the people living in the household.

Each country uses a scale of 8-12 categories, corresponding to national norms (in particular monthly or annual income).

During the analysis, the distribution of replies is studied and four quartiles established. At European level, the four upper quartiles in each country, the lower quartiles etc are considered together. Lastly, there is a classification into four groups, plus the group of don't knows.

Lower quartile	R- -
	R-
	R+
Upper quartile	R+ +

C. OPINION LEADERSHIP ANNEX

What is an opinion leader? Someone who, within the framework of certain social functions, tends to exert more influence on other people's opinions than they exert on his/hers. If all the members of a social group were equivalent and substitutable from the point of view of the formation of group opinions, attitudes and behaviour, the group would carry on functioning in its way, even if any members disappeared. The leader is precisely the one who ensures that things are otherwise. He/she influences the others - let us repeat - more than they influence him/her. And not just sometimes either, but in a relatively constant and predictable way.

The idea of market surveys, opinion polls and social psychology studies more generally is to find the leaders. There are only three ways of doing this:

1. A sociometric study of the respective influences in a given group. However, this method can really only be used in the laboratory or in small groups.

2. Study via the questioning of privileged informers who say who, in their opinion, exercises leadership in a particular group. This method has the same limitations and, moreover, runs the risk of coming up with the "personalities" - i.e. the people in what are known to be important social positions - rather than the leaders who are really involved in the life of the group.

3. Self-selection of leaders by survey = i.e. by defining the leaders as the individuals who have certain characteristics typical of what is generally considered as an attitude of leadership (an interest in certain problems and degree of involvement, in breadth and intensity, in the life of the group).

We used this last method, because it seemed to us to be the only one which could be used operationally in surveys using representative samples of many, varied populations.

The analysis of the results gathered in the previous surveys showed that it was statistically significant to construct an index according to the answers given by all the respondents to two questions dealing with the propensity to talk about politics among friends and the propensity to convince other people of some strongly-held opinion.

To avoid any confusion with the notion of institutional leader (which is often used in research work), we shall use the term opinion leadership.

The index was constructed in such a way as to contain four degrees - the highest corresponding to the people we shall henceforward call opinion leaders (about 12% of the European population) and the lowest to the non-leaders (about 25%). The two intermediate degrees correspond, by construction, to people who are slightly more and people who are slightly less of leaders than the average member of the public.

The following table shows how the leadership index was constructed.

	Convince other people...				
	often	**sometimes**	**rarely**	**never**	**?**
Talking politics					
often	++	++	+	+	+
sometimes	+	+	-	-	-
never	-	-	--	- -	- -
?	-	-	--	- -	- -