

Brussels, 30th September 1987

EMBARGO UNTIL 8 OCTOBER at 12hrs

Except :

Paris : 8/10 at 18hrs
Brussels : 9/10 at 12hrs
Copenhagen : 9/10 at 12hrs
The Hague : 9/10 at 12hrs



EUROPE AGAINST CANCER

Survey: Europeans and the prevention of cancer

A working document of the services of the
European Commission

EUROPEANS AND THE PREVENTION OF CANCER :

A public opinion survey

Within the framework of the "Europe Against Cancer" programme (1987-1989), in March and April 1987 a sample survey was conducted in twelve European Community member countries with a view to ascertaining :

- . the degree of awareness and the status of application by Europeans of the principal individual rules of cancer prevention ;
- . the attitudes of Europeans in respect of a series of national and Community measures against smoking.

This overview of the attitude of Europeans towards cancer prevention will inform and guide the action of the principal actors responsible for implementing the "Europe Against Cancer" programme : cancer prevention organisations, Ministers of Health, European Commission.

I. GENERAL ASSESSMENT OF THE POTENTIAL FOR CANCER PREVENTION

The epidemiological data available would seem to indicate that three quarters of the deaths caused by cancer are related to external factors and could theoretically, therefore, be avoided. In 1981, R. Doll and R. Peto, in their world-acclaimed report ("The Causes of Cancer"), conclude that in the United States 30% of deaths by cancer are caused by tobacco, 35% by food (there being, it is agreed, a broad margin of uncertainty), 4% by occupation, 3% by alcohol, 2% by pollution, etc. Naturally, such data may vary from one country to another, reflecting differences in ways of life (e.g. consumption of alcohol) or in policies implemented (e.g. anti-tobacco campaigns). Thus, in France, the role of alcohol is of greater importance, causing 10% of the deaths by cancer (M. Tubiana, "Le Cancer", 1985), whilst in Sweden, one of the most advanced nations in the fight against tobacco, the role of tobacco is of less importance, causing 15% of the deaths by cancer (Swedish Cancer Committee).

However, given the present state of our knowledge, it is not possible actually to prevent or avoid three quarters of all cases of cancer. Nonetheless, acting on the causes of the best identified types of cancer would definitely make it possible in Europe to avoid 40% of the occurrence of cancer in men and 20% in women. Thus, to take an example, four out of the five deaths by cancer of the lung in men would be avoided if there were no smokers. For women, three quarters of the

deaths from cancer of the womb would be avoided if proper smear test screening programmes were implemented whilst one-third of the deaths caused by breast cancer could be avoided by suitable mammographic screening programmes.

I.1 MAJOR UNDER-ESTIMATION OF THE POTENTIAL FOR THE PREVENTION OF CANCER (see Table 1)

To assess the awareness of Europeans as to the potential for cancer prevention, the following question was put : "In your opinion, can cancer be prevented or avoided ? In three quarters of cases, in half the cases, in a quarter of cases, less often, never ?"

It was naturally difficult for the non-specialist to be acquainted with the theoretical potential (3/4) or the present potential (1/3) for cancer prevention. Reading Table 1 requires certain precautions to be taken. None the less, this table makes it possible to make a totally unambiguous assessment of the percentage of the population unaware of the potential - theoretical or actual - for cancer prevention. Thus, nearly 4 Europeans out of ten are ill-informed or underestimate the potential for cancer prevention since :

- 15% replied that they did not know whether or not cancer was avoidable;
- 8% replied that it was never avoidable;
- 16% replied that it was avoidable in less than one case out of four.

The percentage of the "don't knows" is highest in Spain (56%), Netherlands (54%), Portugal (52%) and Greece (51%). At the other end of the scale, the lowest number of the "don't knows" is in France (22%), Luxemburg (30%) and Belgium (34%).

In addition to nationality, including everything that this variable covers in the way of socio-cultural elements not measured here, it would appear that answers are conditioned by the education level of the person interviewed.

Obviously, information and public awareness-raising campaigns can still play a major role in proving that "cancer is avoidable", and in combatting the traditional erroneous image of the inexorable nature of cancer.

I.2 FAIRLY ACCURATE ASSESSMENT OF THE ROLE OF TOBACCO, UNDER-ESTIMATION OF NUTRITION FACTORS, OVER-ESTIMATION OF RADIO-ACTIVITY AND THE ENVIRONMENT (see Table 2)

To test the awareness of the Europeans as to the most frequent causes of cancer, a list of known causes was presented to each person interviewed (see Table 2) and the following question was put to them : "Using this list, can you tell me what, in your view, the most frequent causes of cancer are ?" (Several were possible).

The vast majority of Europeans (83% of the French, though only 65% of Germans and a European average of 72%) rightly point to tobacco. This shows that the information and public education campaigns are, in this respect, beginning to produce results. However, there is still some way to go, since 28% of Europeans are still unaware that tobacco is by far the most wide-spread carcinogenic agent in our environment. The percentage of "don't knows" is higher in Germany, Denmark, the Netherlands and Spain at some one third.

Quoted subsequently, in decreasing order of frequency, come radio-activity (54%), pollution (44%), certain occupations (34%), alcohol (30%), excessive exposure to the sun (27%), heredity (24%), psychological problems, stress (17%), viruses (14%), insufficient consumption of fresh fruits and vegetables (8%).

Epidemiological cancer specialists will unquestionably be surprised by the great importance attributed to radio-activity or pollution as well as certain occupations, and by the overly minor role attributed to nutrition factors.

The incrimination of alcohol is the point on which Europeans are most at variance from one country to another. It is most often quoted in France (63%) and it is in countries such as Denmark (13%) and the United Kingdom (11%) that it is quoted the least. It is true that the consumption of alcohol, and therefore its influence on the frequency of cancer, varies from one country to another and is particularly high in France; this explains the record death rate by cancer of the oesophagus.

What is worth gleaning from these answers is that tobacco is the number-one quoted cause of cancer in all the countries without exception by a large majority of interviewees : 65% in Germany and 83% in France. Moreover, and this deserves enlarging upon, tobacco consumption habits have but little influence on opinions on the main causes of cancer. Heavy smokers are hardly fewer in number to denounce tobacco than anyone else :

Quote tobacco as the most
frequent cause of cancer :

Depending on consumption habits :

Have never smoked	75%
Former smokers.....	78
Pipe or cigar smokers.....	65
Cigarette smokers : light (<10)..	71
medium (10-24)	66
heavy (>25) .	65

Average for the overall population 72

I.3 KEEN INTEREST IN INFORMATION ON HEALTH (see Table 3)

Tables 1 and 2 show the need better to inform Europeans on the possibilities of preventing cancer. Such a campaign will be all the easier as 8 Europeans out of 10 are "often" or "sometimes" interested in information on health (Table 3). This result augurs well for the likelihood of the European information and awareness-raising campaigns for the prevention of cancer being successful (European Week Against Cancer, May 1988, European Year for Information on Cancer, 1989).

II. BEHAVIOURAL CONFORMITY TO THE "EUROPEAN CODE AGAINST CANCER"

The first of the two major objectives of this inquiry was to endeavour to evaluate European's degree of awareness of the recommendations adopted by cancerologists with a view to preventing this disease. These recommendations are grouped under the general title "European Code Against Cancer (see annex).

An initial question put to both men and women bore on the knowledge of eleven recommendations and on opinions as to the difficulty on implementing each on of them. Another question, put to women only, bore on the knowledge of three specific recommendations and on the effective application of each one of them by the women interviewed (smear test, breast screening, mammography).

II.1 FAIR KNOWLEDGE OF THE RECOMMENDATIONS FOR ALL (MEN AND WOMEN) WITH THE EXCEPTION OF THE "NUTRITION COMMANDMENTS" (see Table 4)

Among the recommendations submitted to the public overall, one stands out markedly from the others since it is best known (88% of persons interviewed) and the one deemed the most difficult to apply (28%) : "Do not smoke".

There then follow (58% of the public are aware of them) : "See a doctor if you notice a lump or abnormal bleeding ; a persistent cough or change in voice" and "See a doctor if you notice any change in the size or colour of any mole or beauty spot".

Among the other recommendations four are known to 4 to 5 persons out of 10 :

- "Avoid, as far as possible, sunburn and intense or prolonged exposure to the sun (52%) ;
- "Moderate your consumption of alcoholic drinks" (49%) ;
- "Do not smoke in the presence of others" (45%).

The other recommendations, concerning the avoidance of overweight and the change of nutritional habits, are known only to about 1 person in 3.

Regarding possibilities for application (and on the supposition that the issue was properly understood by each person interviewed in accordance with his/her own personal situation), it would seem there would be no difficulty except in regard to tobacco and, to a lesser extent, the recommendations relating to overweight and the intake of fat foods.

Cancerologists' recommendations
on tobacco addiction

	<u>Total smokers</u> (pipe/cigarettes)	<u>Cigarette smokers</u>		
		Light (< 10)	medium (10-24)	heavy (> 25)
Abstention				
Known	81	90	86	86
Difficult	53	46	72	84
Low tar content				
Known	45	50	49	47
Difficult	7	4	9	9
Not smoking in the presence of others				
Known	49	50	43	39
Difficult	6	8	4	9

Here it is not devoid of interest to underscore the fact that heavy smokers are but little less informed than the remaining members of the public about the recommendations made by cancerologists (or more generally by the medical profession). However, two distinctions are worth noting. On the one hand, as might be expected, heavy smokers are far more numerous than medium or light smokers in considering that it is difficult to refrain from smoking and, on the other hand, they are far less numerous in worrying about not smoking in the presence of others.

A comparison between countries produces the following results :

- The damaging effects of passive smoking are particularly little known in Portugal and Spain, but also in the Netherlands and the Federal Republic of Germany, where scarcely 1 person in 3 is aware of the preventive rule "Do not smoke in the presence of others".
- The commandment "Moderate your consumption of alcoholic drinks" is the least known in the United Kingdom (26%), in the Netherlands (35%) and in Germany (39%).
- With the exception of Denmark, where they are very well known, the nutritional commandments are generally less known in the other countries.
- The commandment on intense or prolonged exposure to the sun is little known in Spain (37%) and Portugal (32%), but also in the Federal Republic of Germany (47%) and in Belgium (49%).

- Generally well known, the commandment on beauty spots and moles is little known in Portugal (34%), but also in Belgium (41%), and Spain and the United Kingdom (46%).

II.2 PRESENT BEHAVIOUR RELATING TO THE PREVENTION "COMMANDMENTS" ON THE PART OF ALL (see Table 5)

It may fortunately be observed that certain ill-known commandments are in fact applied, particularly in regard to the intake of fresh fruits and vegetables : more than two Europeans in three apply it - but only one Portuguese out of three - whilst only one European in three is aware of its role in cancer prevention.

Another outstanding factor is that two Europeans out of three do not smoke. It is Denmark (54% of non-smokers) and the Netherlands (56%) which score the lowest marks. However, a finer analysis is required (see para. III.1 below).

Finally, a great deal remains to be done - particularly in Portugal - in getting the commandments to be applied : fibres, fats, overweight and exposure to the sun, since only one European out of three applies them.

II.3 LOW LEVEL OF RECOURSE TO MEDICAL CANCER SCREENING EXAMINATIONS (see Graph 1)

The answers to the question "Have you already had cancer screening examinations ?" vary considerably according to sex : fewer than two men (17%) and nearly five women (46%) out of ten reply that they have had at least one such examination :

	All %	Men %	Women %
Have had screening examinations			
- Yes, several	22	10	34
- Yes, once	10	7	12
- <u>Total "Yes"</u>	<u>32</u>	<u>17</u>	<u>46</u>
- No	66	81	52
- No answer	2	2	2
	---	---	---
Total	100	100	100

- Generally well known, the commandment on beauty spots and moles is little known in Portugal (34%), but also in Belgium (41%), and Spain and the United Kingdom (46%).

II.2 PRESENT BEHAVIOUR RELATING TO THE PREVENTION "COMMANDMENTS" ON THE PART OF ALL (see Table 5)

It may fortunately be observed that certain ill-known commandments are in fact applied, particularly in regard to the intake of fresh fruits and vegetables : more than two Europeans in three apply it - but only one Portuguese out of three - whilst only one European in three is aware of its role in cancer prevention.

Another outstanding factor is that two Europeans out of three do not smoke. It is Denmark (54% of non-smokers) and the Netherlands (56%) which score the lowest marks. However, a finer analysis is required (see para. III.1 below).

Finally, a great deal remains to be done - particularly in Portugal - in getting the commandments to be applied : fibres, fats, overweight and exposure to the sun, since only one European out of three applies them.

II.3 LOW LEVEL OF RECOURSE TO MEDICAL CANCER SCREENING EXAMINATIONS (see Graph 1)

The answers to the question "Have you already had cancer screening examinations ?" vary considerably according to sex : fewer than two men (17%) and nearly five women (46%) out of ten reply that they have had at least one such examination :

	All %	Men %	Women %
Have had screening examinations			
- Yes, several	22	10	34
- Yes, once	10	7	12
- Total "Yes"	32	17	46
- No	66	81	52
- No answer	2	2	2
	---	---	---
Total	100	100	100

Another variable which plays an important role, combined with sex (1) : 61% of women between 40 and 49 years of age have had at least one screening examination; for men, the maximum is reached later (60-69 years) and is twice as low (28%) (see Graph 1).

It should be stressed that these are examinations of which the patients are informed and aware. It is possible for screening examinations to be conducted without the patient being informed; it is also possible that practices relating to the informing of patients vary from country to country. Nonetheless, the replies to the questions vary considerably from one country to another (see Table 6).

It is in Germany that there is the greatest number of positive replies (men 36%, women 76%). It is in Italy, Spain and in particular Portugal that they are the lowest. The figures are relatively low for the Netherlands, France, Greece and Ireland.

As may be seen from these results, there is still a great discrepancy between the standards of optimal medical monitoring from 50 to 60 years of age and actual practices.

II.4 CONSIDERABLE DISCREPANCY BETWEEN "AWARENESS" AND "APPLICATION" OF THE "COMMANDMENTS" FOR WOMEN (see Table 7)

There are three recommendations designed specifically for women :

	<u>Cancerologists' recommendations for women</u>	
	Known	Applied
Above 20 to 30 years, have a regular cervical smear.....	75%	43%
Check breasts regularly.....	84	50
If possible, undergo mammography (X-ray of the breasts) above the age of 50 years....	58	13
None of 3 recommendations....	10	36

(1) In the absence of data collected over a long period, it being impossible to distinguish between the life-cycle effect and the generation effect (changes in behaviour, progress in health care, etc.).

From these results, for the overall European female population aged 15 years and over, it may be concluded that the level is rather good for checking breasts and for cervical smears, but far less so for mammography. At the same time, there may be observed a considerable discrepancy between the fact of being informed as to the importance of an examination and the fact of undergoing such an examination.

Thus, three European women out of four are aware of the importance of cervical smears, but only 43% of them actually put the corresponding recommendation into practice, whilst this effective screening test would make it possible to avoid three quarters of the cases of cancer of the cervix.

The differences from one country to another are considerable, and, in each country, age and level of education result in considerable discrepancies.

In short, concerning awareness of these three recommendations, women in France, the United Kingdom, Italy, Denmark and Luxemburg are better informed; they are less so in Belgium, Spain and particularly Portugal.

Concerning the application of the recommendations, four countries are clearly in the lead : Luxemburg, France, Germany, the United Kingdom, and four countries bring up the rear : Ireland, Greece, Spain and Portugal. Concerning mammography, it is worth noting that Denmark and the Netherlands are in the same category as Greece, Spain, Portugal and Ireland which are the countries making least use of this effective screening technique which would make it possible to avoid one third of the deaths caused by cancer of the breast.

These differences between countries may have a host of causes, including the level of socio-economic development, the status of women, the lack of information on screening on the part of general practitioners, the inadequacies of screening programme organisation and the organisation of the public health and social security services are probably not the least.

The effect of age

Middle-aged women (25 to 55 years of age) are markedly better informed about the three recommendations under study here than younger or older women. They are also more numerous in checking their breasts and having cervical smears.

	According to age			
	15-24	25-39	40-54	54 or +
Cervical smear				
Known	62%	86%	78%	69%
Applied	24	63	53	27
Checking breast				
Known	79	90	87	79
Applied	39	61	59	39
Mammography				
Known	42	65	65	57
Applied	3	11	20	15

The general trend of the variations according to age can be seen in almost all of the Community countries, although there is a greater or lesser gap between the two extreme age groups in relation to the national average.

In Spain, Portugal and Greece, women aged over 55 years lag far further behind the national average than women in the same age group in the other countries.

However, another very important phenomenon may be observed in Greece : young women under the age of 25 years are much better informed than the national average. This is especially true for the cervical smear, the degree of awareness of which is the highest in Europe (95%). It is true that this test was developed by a Greek biologist, George Nicholas Papanicolaou (1883-1962) and that this effective screening technique has formed the subject of numerous information and education campaigns.

In Belgium, however, it is rather the younger women, who are the least well informed.

Finally, with the exception of Luxemburg, it may be noted in all European countries that there has been a dramatic drop in frequency of recourse to the cervical smear beyond the age of 55 years (27% only), a period in life when the risks of contracting cancer of the cervix are still high. This dangerous situation results from the fact that in many countries, cervical smear tests are still not recommended beyond the age of 55 years, and also from the fact that in the twelve-nation Europe, cervical smears are for the most part conducted by gynecologists, who are consulted very rarely or not at all by women after menopause.

The effect of level of education

Regarding the checking of breasts and cervical smears : the better a woman's level of education, the better she knows and applies the recommendations. However, the discrepancy between knowledge and application remains high for all categories.

For mammography, education level has a slight influence on knowledge, but none whatever on application. The difference observed here is probably due to the fact that mammography is prescribed by a doctor and cannot be obtained at the mere initiative of the woman.

These latter observations apply to all the countries.

*

* *

An analysis of the results deriving from the rules of prevention recommended by cancerologists shows that in all Community member countries, and particularly in some of them, there remains a sometimes major dearth of public information. This inadequacy concerns most of the recommendations excepting those relating to tobacco addiction. On the latter point, campaigns conducted in recent decades are, it would appear, beginning to produce results, but there is still a long way to go...

Concerning women, the recommendations on the regular checking of breasts and cervical smears are generally well known but insufficiently applied.

The most striking observation from this enquiry is, as might have been expected, the discrepancy between awareness of the problems and the relevant behaviours.

III. RECEPTION GIVEN BY EUROPEANS TO DRAFT NATIONAL AND COMMUNITY MEASURES AGAINST SMOKING

III.1 EXTENT OF TOBACCO SMOKING IN EUROPE OF THE TWELVE (see Table 8)

Among the two hundred and fifty-four million Europeans aged 15 years and over, it may be estimated that there are 94 million smokers. In addition, 48 million smoked in the past, but have given up.

	Community as a whole
	%
Smokers.....	37
Former smokers.....	19
Non-smokers (never having smoked)	44

	100

Thus, over half the European adult population have smoked at some stage (smokers or former smokers = 56%) ; within this group of people who have smoked one in three (19%) has stopped smoking.

Among the "active smokers", more than nine tenths, or a total of 88 million, consume tobacco in the form of cigarettes. Pipe or cigar smokers - almost exclusively men - only account for 3% of the European adult population, about 7 million people in all.

The cigarette smokers questioned by the interviewer on their approximate daily intake replied without difficulty in almost all cases ; less than one per cent could not or would not answer. It was therefore possible to group these smokers into the following categories :

- light smokers, who smoke fewer than ten cigarettes a day and represent a quarter of cigarette smokers ;
- medium smokers (ten to twenty-four cigarettes a day), which account for over half the total of cigarette smokers ;
- heavy smokers, who smoke twenty-five or more cigarettes a day, represent 15% of the total of cigarette smokers.

This general view of the smoking world provides the basis for study of the variations according to socio-demographic variables and according to country.

III.1.A. Breakdown by sex and age for Twelve-Nation Europe (see Table 9)

Sex and age (see Graph 2 and Table 9) generally emerge as the most important variables. On the whole, far fewer European women than men are cigarette smokers (29% against 41%), but differences on the basis of sex are much reduced among the younger generation (under 30), which would lead one to wonder whether young girls under the age of 15 (who are not covered by the present survey) are not likely to "catch up" with the young boys of the same generation and start smoking in the next few years.

A comparison between the United States and Europe may be made thanks to the recent results published in the Gallup Report n° 258, March 1987, Princeton, USA. According to this study, in the United States, three adults (aged 18 years or over) out of ten are cigarette smokers, viz. slightly less than for the European Community as a whole, the difference being greatest for males :

	<u>Cigarette smokers</u>	
	<u>U.S.A</u>	<u>C.E.E.</u>
Total	30%	35%
of which		
Men	33	41
Women	28	29

Measured over a long period, 1944-1987, the proportion of cigarette smokers in the United States has tended to decrease more sharply among men than among women :

	<u>United States</u>	
	<u>Men</u>	<u>Women</u>
1944	41%	36%
1954	45	32
1972	43	38
1983	38	36
1987	30	28

III.1.B. Breakdown according to the number of cigarettes smoked.

Three categories of smokers were defined above on the basis of number of cigarettes smoked per day : light smokers, medium smokers and heavy smokers. Between the ages of 20 and 60, the proportion of heavy smokers among the male population is of the order of 10%, reaching a peak of 12% between the ages of 30 and 39. Among women, the proportion of heavy smokers reaches a level of 4 to 5% between the ages of 20 and 50.

Consumption of cigarettes according to sex and age (as a percentage of the age group)

	Light smokers (< 10)	Medium smokers (10-24)	Heavy smokers (= / > 25)	No answer	Total smokers
Men :					
15-19 yrs	10%	19%	1%	1%	31%
20-29	8	34	9	-	51
30-39	8	31	12	2	53
40-49	7	27	10	1	45
50-59	8	21	10	-	39
60-69	8	19	3	-	30
70 and +	13	11	1	1	36
Total men	8	25	7	1	41
Women :					
15-19 yrs	14%	11%	1%	-	26%
20-29	16	27	5	1	26
30-39	14	20	4	-	38
40-49	8	15	4	-	27
50-59	6	10	2	1	19
60-69	5	8	1	-	14
70 and +	-	-	-	-	7
Total women	10	15	3	1	29

* (Number of cases too small for analysis)

III.1.C. Analysis by country (see Tables 9 and 9 bis)

37% of Europeans are addicted to tobacco (cigarettes, cigars or pipe). This proportion varies according to the country : nonetheless, this initial comparative study reveals that the figure is slightly higher for Denmark (46%), the Netherlands (44%), Greece (43%) and Spain (41%) and slightly lower for Ireland, Italy, Portugal (33%) and Belgium (32%). But if one takes daily consumption into account, it would appear that smoking is most widespread by far in Greece.

The fact that Denmark has a large proportion of smokers, although it applies the highest taxation on tobacco in the Community, comes as a surprise, at least at first sight. However, one should not restrict oneself to an over-generalised analysis of "cigarette smokers" and "the price per packet of cigarettes". Obviously, a light smoker smoking one cigarette only each day might well be less sensitive to the price of a packet of cigarettes. This analysis, therefore, should be refined taking into account sex, age and the quantity of cigarettes smoked. Table 9 bis shows this breakdown and at the same time calculates the correlation between the "percentage of smokers" and "the retail price of the most commonly smoked packet of cigarettes".

The following results have been able to be highlighted :

- a) The correlation for the overall population of smokers is slightly negative ($R = -0.18$). As might be expected, the correlation becomes markedly negative ($R = -0.52$) when only heavy smokers are taken into account (over 25 cigarettes per day). To take an illustration, Denmark, out of the twelve European Community member nations is the country with the lowest percentage of heavy smokers (1.6%), while Greece holds the reverse record (15.3%).
- b) The correlation for the male population of smokers is markedly negative ($R = -0.63$). By contrast, addiction to tobacco among women - among whom there are fewer heavy smokers than among men - does not seem to be influenced by the price of a packet of cigarettes ($R = +0.58$!). Surprisingly it is in the countries where the prices are the highest that there is to be found the greatest number of female smokers (Denmark = 39.8%, the Netherlands = 39.2%, the United Kingdom = 33.6%). It would appear, therefore, that in these countries, the socio-cultural variables (the cigarette, symbol of male-female equality ?) take precedence over economic constraints.
- c) Finally, for young smokers between the age of 15 to 24 years, there is a fairly marked and negative correlation ($R = -0.46$). As might be expected, the price constraint has a deterrent effect mostly on young smokers. By way of an example, the four countries of the European Community where taxes on cigarettes are the lowest are the countries where tobacco addiction among young people is highest : Spain (55.4%), France (51.1%), Greece (48.4%) and Portugal (45.2%).

III.1.D. Awareness of tar content

Other questions asked for the same survey confirm that smokers do not in general pay much attention to the tar content of the cigarettes : 36% say that they do take notice of it.

III.1.E. The desire to stop smoking or to reduce consumption of tobacco (see Table 10)

More than half of all smokers (53%) said they wanted to reduce their consumption of tobacco or stop smoking completely. This is a considerable proportion which is even higher among the medium and heavy smokers :

	Cigarette smokers			
	Light smokers	Medium smokers	Heavy smokers	Total
	%	%	%	%
Stop smoking...	27	29	32	29
Reduce consumption	16	31	28	26
	--	--	--	--
Total wanting to change habits	43	60	60	55

III.1.F. People disturbed by cigarette smoke
(see Table 11)

Primarily non-smokers are disturbed by cigarette smoke. However, some smokers, even heavy smokers, also answered positively to this question.

	Never smoked	Former smokers	Light smokers	Medium smokers	Heavy smokers
Disturbed by other people's smoke :					
a lot	49	38	16	7	6
a little	33	34	32	23	18
not at all	18	28	52	70	76
	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

These results indicate that a public information and education campaign based on the first recommendation of the code against cancer could get across two basic messages : firstly, now that the danger related to tobacco widely known, only the will to stop smoking or to reduce consumption is lacking ; secondly, the duty to show respect for the health of other people.

III.2 GOOD SUPPORT FROM THE PUBLIC FOR MEASURES TO COMBAT SMOKING (see Table 12)

In view of the importance attributed to the need to combat smoking by cancerologists and the medical profession in general, the European Commission carried out public opinion surveys to discover the reaction to a number of proposed legislative provisions.

"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 ?"

There was widespread support for each of the proposed measures, although there was some reticence with regard to the banning of duty-free sales of tobacco at seaports, airports or in aircraft or ships, etc.

It is not surprising to learn that non-smokers and former smokers gave strongest support to these measures. However, it is remarkable that most smokers, including the heavy smokers, also said that they were in favour of banning the sale of tobacco to young people under 16, banning advertising for tobacco and forbidding smoking in public places.

Denmark stands out among the other countries as being by far the most reserved with regard to these measures ; most Danes answered negatively with regard to the banning of the sale of tobacco to young people under 16 (50% against) and responded especially negatively to the banning of duty-free sales at seaports, airports, etc. (64% against).

The following comments are based on an analysis of the responses to each individual measure :

III.2.A. A very large increase of taxes on tobacco, part of which would be devoted to fighting cancer

In the context of its work related to the completion of the internal market by the end of 1992, the European Commission put forward a proposal to the Council in July 1987 for the harmonisation of excise duties and value added tax, including those relating to manufactured tobacco. The principle of upward alignment of tax on tobacco was applied for reasons of public health. With the exception of Denmark, where the price of cigarettes should go down, the proposals of the European Commission, when adopted by the Council, will lead to a significant increase in price in all countries where the present tax level is low, while the situation will remain almost unchanged in Germany, the United Kingdom and in Ireland, countries with the highest tax levels outside of Denmark.

This measure received widespread support in the Community as a whole, with seven out of ten countries in favour of its adoption. There was naturally less support in the countries with very high tax levels : Denmark (54% in

favour) and Germany (59%). In these countries, one citizen in three was against such measures. In contrast, in France and Italy, with eight out of ten people in favour, there would clearly be very strong public support for a large increase in tax on tobacco, part of which would be devoted to fighting cancer.

III.2.B. The banning of all advertising of tobacco

Here again, seven out of ten Europeans were in favour of the measure. However, although 84% of Italians were in favour, only 53% of Danes supported its adoption. According to the previously quoted Gallup Report, only 49% of Americans are in favour of such a measure, but it is true that the proportion was only 36% in 1977.

III.2.C Banning the sale of tobacco to young people under 16 years of age

This was the most popular of the proposed actions in the fight against smoking, with 84% of Europeans in favour. There was most support in the United Kingdom, with 97% positive answers, and in Ireland with 93%. It is interesting to note that these high scores were reached in the two Community countries which already have laws protecting young people. In contrast, opposition to the proposal was highest in Denmark, where 50% of answers were negative.

III.2.D. Banning of duty-free sales of tobacco

This was by far the least popular of the proposed actions put forward by the European Commission in the context of the finalisation of the internal market. Only a little more than one European in two would support such a measure, and opposition was strongest in Denmark (64% negative answers), the United Kingdom (49%), Germany (46%) and Ireland (45%). These are of course the four countries with the highest taxes on tobacco, and consequently, people in these countries are in the best position to appreciate the economic advantages of duty-free sales.

III.2.E. Banning of smoking in public places.

This measure was very well received, with almost eight Europeans in ten in favour of its adoption. In Italy, where in 1986 a big public debate led to the implementation of such measures, there was widespread support (93% in favour). In Belgium, where a similar measure came into force on 1 September 1987, the level of support was 74%. There was also strong support for the adoption of such a measure in France (91%) and in

Portugal (82%). In contrast, there was least support in Germany, but six out of ten people questioned nonetheless expressed support for the measure.

It may also be noted that in the United States, only 55% of those interviewed are in favour of this ban.

IV. CONCLUSION

This initial survey has increased our knowledge and possibilities for evaluating - if not always for explaining - public opinions, attitudes and behaviour in relation to the fight against cancer ; it constitutes an original contribution to the work of those - whether public bodies or private organisations - leading the fight against this disease and promoting its prevention. Some research had of course been done in this area previously, but this is the first time that comparative international research has been carried out in twelve countries which are very different in many ways, leading to a better understanding of the numerous individual variables (sex, age, education, etc.) and collective variables (level of development, lifestyles, health care systems and perhaps cultural standards) which condition - in dynamic interaction with each other - every public information and education action.

All the information gathered and analysed (1) reveals that certain countries and some population groups in every country are behind the others in relation to knowledge of the problems of cancer prevention and even moreso the implementation of the corresponding public health recommendations.

The information contained in this study will clarify the task of the various parties involved in the "Europe against cancer" programme (1987-1989). Further studies will be carried out in 1988 and 1989 in order to evaluate the effectiveness of the various actions which have already been implemented.

(1) A more detailed report will be published at a later date.

EUROPEANS AND THE PREVENTION OF CANCER :

A public opinion survey

Annex

- Table n° 1 : ASSESSING THE POTENTIAL FOR THE PREVENTION OF CANCER
- Table n° 2 : CAUSES AND RISK FACTORS CONSIDERED TO BE FREQUENT
- Table n° 3 : INTEREST SHOWN IN HEALTH INFORMATION
- Table n° 4 : KNOWLEDGE OF THE EUROPEAN COMMANDMENTS FOR CANCER PREVENTION AND OPINIONS ON THE DIFFICULTY OF APPLYING THEM
- Table n° 5 : PRESENT BEHAVIOUR IN RELATION TO THE COMMANDMENTS FOR PREVENTION : ADAPTATION OF LIFESTYLES
- Graph n° 1 : THE MEDICAL CANCER-SCREENING EXPERIENCE
- Table n° 6 : THE MEDICAL CANCER-SCREENING EXPERIENCE FOR EACH COUNTRY ACCORDING TO SEX AND AGE
- Table n° 7 : KNOWLEDGE AND APPLICATION OF THE COMMANDMENTS RELATING SPECIFICALLY TO WOMEN ACCORDING TO COUNTRY AND AGE-BRACKET
- Table n° 8 : SMOKING IN THE EUROPEAN COMMUNITY : SMOKERS AND NON-SMOKERS
- Graph n° 2 : PROPORTION OF CIGARETTE SMOKERS IN THE COMMUNITY
- Table n° 9 : CIGARETTE SMOKERS ACCORDING TO SEX AND AGE
- Table n° 10 : THE DESIRE TO STOP SMOKING
- Table n° 11 : DO NOT SMOKE IN THE PRESENCE OF OTHERS !
- Table n° 12 : OPINIONS OF EUROPEANS ON THE ANTI-SMOKING MEASURES PROPOSED BY THE COMMISSION

TABLE 1
ASSESSMENT OF POTENTIAL FOR CANCER PREVENTION

	CASES OF CANCER CAN BE AVOIDED ...						GRAND TOTAL (1 à 6)	
	In 3/4 of cases (1)	In half of cases (2)	In quarter of cases (3)	Less often (4)	Never (5)	No reply (6)		"don't" know (4+5+6)
EC OVERALL	10%	28%	23%	16%	8%	15%	39%	100%
BELGIQUE/BELGIE	11	28	26	17	7	11	35	100
DANMARK	12	25	20	11	4	28	43	100
DEUTSCHLAND	7	31	22	22	5	13	40	100
ELLAS	6	16	27	26	8	17	51	100
ESPANA	10	19	15	20	10	26	56	100
FRANCE	18	37	23	8	6	8	22	100
IRELAND	6	22	24	19	12	17	48	100
ITALIA	11	26	27	16	10	10	36	100
LUXEMBOURG	10	29	31	14	4	12	30	100
NEDERLAND	4	20	22	25	16	13	54	100
PORTUGAL	13	15	20	13	5	34	52	100
UNITED KINGDOM	8	27	24	12	11	18	41	100

(1) Weighted average

TABLE N° 2.

CAUSES AND RISK FACTORS CONSIDERED TO BE MOST FREQUENT

	SMOKING	RADIO- ACTIVITY	POLLUTION	CERTAIN TYPES OF WORK	ALCOHOL	EXPOSURE	HEREDITY	STRESS	INFECTION	TOO MUCH FAT	NOT ENOUGH FRUIT AND VEGETABLES	DCN'1 KNOW
WHOLE OF EC (1)	72	54	44	34	30	27	24	17	14	13	8	7
BELGIQUE/BELGIË	72	58	42	38	33	38	27	21	18	19	12	5
DANMARK	67	42	43	48	13	15	14	16	4	22	21	8
DEUTSCHLAND	65	56	53	44	21	30	33	25	14	18	15	7
ELLAS	70	67	44	18	21	19	28	44	8	16	15	5
ESPANA	67	39	23	23	28	14	22	8	15	6	5	14
FRANCE	83	51	39	26	63	33	21	18	16	11	4	3
IRELAND	75	63	32	26	20	34	25	16	7	10	10	7
ITALIA	74	66	63	30	33	15	21	8	18	10	4	4
LUXEMBOURG	73	69	47	43	45	42	18	25	15	15	11	2
NEDERLAND	67	64	50	34	16	39	25	16	7	19	9	5
PORTUGAL	75	29	40	16	42	17	12	11	16	12	5	15
UNITED KINGDOM	73	53	33	46	11	35	23	17	9	13	9	7

(1) Weighted average

TABLE 3.

INTEREST SHOWN IN HEALTH INFORMATION

	LISTEN TO OR WATCH MEDICAL BROADCASTS, READ ARTICLES ON HEALTH IN THE PRESS						TOTAL	INDEX (2)
	OFTEN	SOMETIMES	SELDOM	NEVER	DON'T KNOW			
(1)	41%	39%	12%	7%	1%	100%	3.14	
BELGIQUE	35	37	17	10	1	100	2.97	
DANMARK	37	38	13	10	2	100	3.04	
DEUTSCHLAND	35	43	16	5	1	100	3.08	
ELLAS	44	34	16	5	1	100	3.19	
ESPANA	47	35	11	6	1	100	3.24	
FRANCE	47	36	10	7	-	100	3.22	
IRELAND	35	39	16	9	1	100	3.01	
ITALIA	39	41	11	9	-	100	3.10	
LUXEMBOURG	45	37	15	3	-	100	3.26	
NEDERLAND	57	30	8	5	-	100	3.39	
PORTUGAL	24	49	14	9	4	100	2.93	
UNITED KINGDOM	38	40	12	9	1	100	3.08	

(1) WEIGHTED AVERAGE

(2) OFTEN = 4; SOMETIMES = 3; NEVER = 1; DON'T KNOWS EXCLUDED

TABEL 4.

KNOWLEDGE OF THE EUROPEAN COMMANDMENTS FOR CANCER PREVENTION AND OPINIONS
ON THE DIFFICULTY OF APPLYING THEM (1)

	CE (2)	B	DK	D	GR	E	F	IRL	I	L	NL	UK	P
DO NOT SMOKE (3)													
Known	88	76	98	76	98	92	91	97	98	86	84	88	85
Difficult	28	25	43	27	29	27	30	31	38	36	36	25	23
DO NOT SMOKE IN PRESENCE OF OTHERS													
Known	45	39	59	29	48	33	68	55	51	29	30	57	33
Difficult	5	8	11	6	6	3	5	7	6	4	3	2	2
REDUCE YOUR INTAKE OF ALCOHOL													
Known	49	41	61	39	57	52	71	46	62	55	35	26	53
Difficult	5	9	9	8	6	4	5	6	5	12	5	3	5
EAT ENOUGH FRESH FRUIT & VEGETABLES													
Known	34	33	69	33	54	27	23	47	48	44	38	30	21
Difficult	3	4	3	4	6	3	3	4	5	5	2	2	2
EAT FIBER-RICH FOOD													
Known	30	32	64	33	31	18	19	56	36	36	36	33	13
Difficult	6	6	3	8	7	4	6	6	8	13	3	2	5
EAT NON-FAT FOOD													
Known	35	37	69	31	45	27	29	36	56	45	38	27	24
Difficult	18	5	28	12	9	5	11	8	17	28	8	6	8
WATCH YOUR WEIGHT													
Known	35	33	59	36	39	30	25	39	51	44	31	27	38
Difficult	13	7	17	15	9	6	12	12	19	17	13	11	8
AVOID INTENSE OR PROLONGED SUN EXPOSURE, ESPECIALLY FOR CHILDREN AND THOSE NOT USED TO THE SUN													
Known	52	49	67	47	55	37	59	65	53	63	56	61	32
Difficult	8	3	12	9	12	6	6	6	14	15	18	6	3
CONSULT A DOCTOR IF YOU NOTICE THAT A BEAUTY SPOT IS BLEEDING OR HAS CHANGED SHAPE OR COLOUR													
Known	58	41	85	58	74	46	64	79	69	59	63	46	34
Difficult	5	4	2	10	3	5	3	3	8	4	6	1	3
CONSULT A DOCTOR IF YOU NOTICE AN UNUSUAL LUMP OR ABNORMAL BLEEDING, PERSISTENT COUGH OR CHANGE IN VOICE													
Known	58	44	88	52	73	56	64	83	65	63	69	54	32
Difficult	5	4	3	8	3	3	4	4	7	5	8	2	3
DO NOT KNOW													
Known	3	10	1	6	1	5	2		1	1	3	3	12
Difficult	41	49	29	38	46	48	38	42	31	23	38	49	54

(1) Pour les commandements concernant spécifiquement les femmes, voir plus loin le tableau n° 7.

(2) Moyenne pondérée.

(3) Le questionnaire comportait en outre une question ainsi formulée : "Si vous ne pouvez absolument pas vous en empêcher, utilisez alors des cigarettes à pauvre teneur en goudron". Ci-dessous les réponses.

Known	43	35	65	38	58	39	35	66	46	36	35	59	19
Difficulté	4	4	8	5	4	2	2	6	5	2	4	2	1

TABLE 5
PRESENT BEHAVIOURS IN RESPECT OF PREVENTION COMMANDMENTS :

ADAPTING LIFE STYLES

	Do not smoke		Do not drink (a) or "often moderate" (b) consumption of alcoholic beverages		Are "often" careful					Watch Weight	Avoid exposure to sun
	(a)	(b)	(a+b)	(a+b)	Eat fresh fruits	Eat fresh vegetables	Eat low-fat foods	Eat foods rich in fibres			
EC OVERALL (1)	63%	29%	24%	53%	73%	66%	38%	35%	34%	33%	
BELGIQUE/BELGIË	68	29	26	55	73	82	35	44	26	37	
DANMARK	54	18	7	25	66	68	36	57	36	22	
DEUTSCHLAND	64	25	12	37	68	63	35	38	40	28	
ELLAS	57	57	10	67	76	71	45	30	39	33	
ESPANA	59	30	38	68	72	60	34	16	26	27	
FRANCE	62	41	33	74	80	78	39	29	41	49	
IRELAND	67	33	9	42	56	67	29	53	19	17	
ITALIA	67	26	40	66	80	48	45	21	32	36	
LUXEMBOURG	65	32	34	66	83	88	41	44	44	43	
NEDERLAND	56	19	22	41	73	81	43	58	38	28	
PORTUGAL	67	38	5	43	35	37	21	13	17	22	
UNITED KINGDOM	63	23	11	34	71	78	39	58	31	29	

(1) Weighted average

THE EXPERIENCE OF MEDICAL CANCER SCREENING EXAMINATION
(according to sex and age)

(Whole of EC)

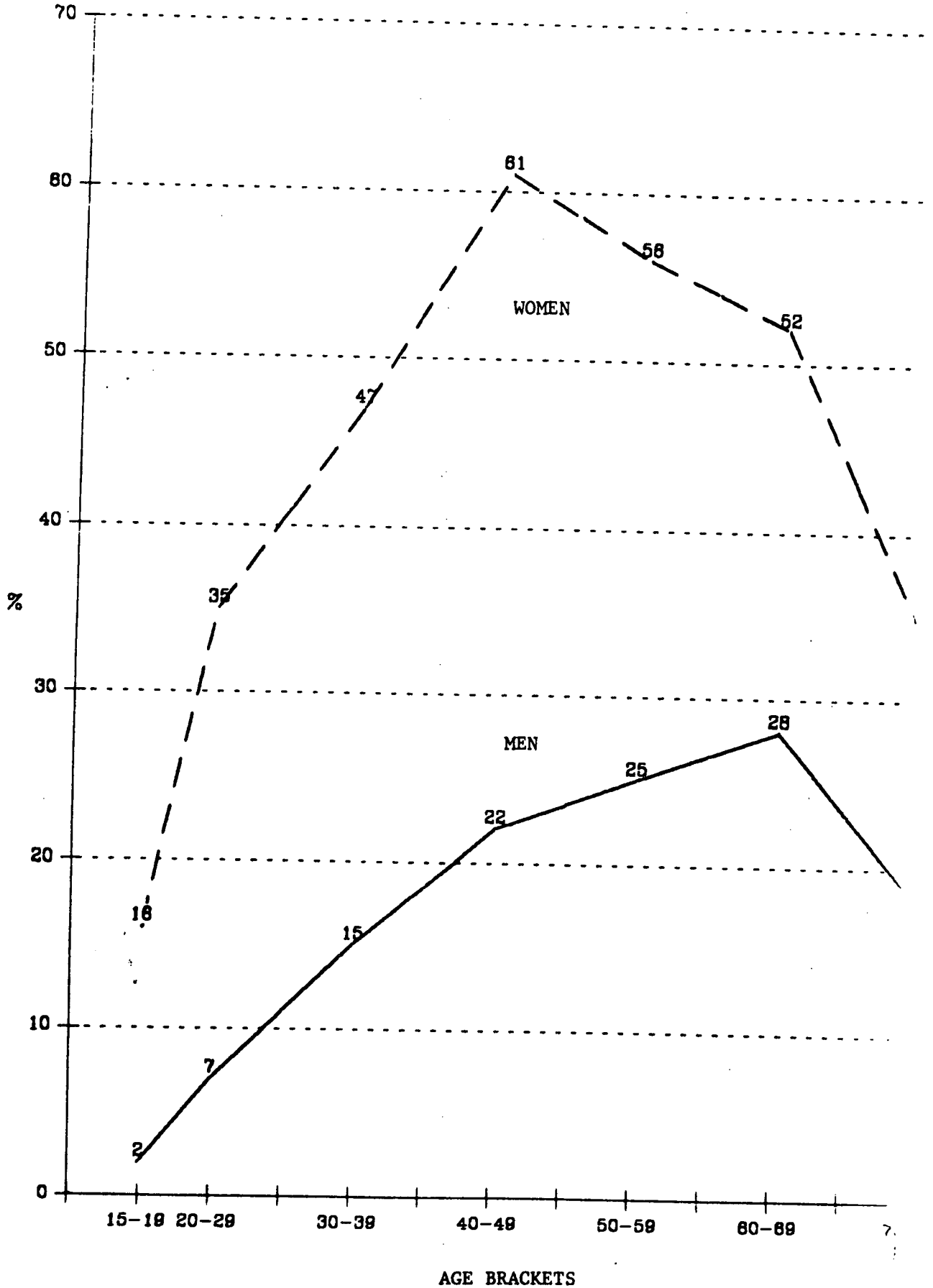


TABLE N° 6

THE EXPERIENCE OF MEDICAL CANCER SCREENING EXAMINATIONS BY COUNTRY ACCORDING TO SEX AND AGE

(Correspondents claiming to have undergone at least one screening, as a percentage of the total for each category)

	MEN					WOMEN				
	15-24 YRS	25-39 YRS	40-54 YRS	55 YRS OR MORE	TOTAL MEN	15-24 YRS	25-39 YRS	40-54 YRS	55 YRS OR MORE	TOTAL WOMEN
BELGIQUE/BELGIE	4%	12%	22%	25%	17%	20%	53%	60%	45%	46%
DANMARK	7	15	30	44	25	27	53	57	54	49
DEUTSCHLAND	6	13	28	27	19	25	71	72	62	60
ELLAS	6	21	45	63	36	41	77	89	83	76
ESPANA	5	7	7	11	8	10	47	53	23	34
FRANCE	4	11	12	10	9	8	29	27	18	21
IRELAND	4	12	18	14	12	11	43	55	36	38
ITALIA	2	5	10	10	7	8	44	50	32	34
LUXEMBOURG	-	7	7	16	8	5	33	39	26	27
NEDERLAND	24	17	24	15	20	35	68	74	44	58
PORTUGAL	1	11	20	24	14	10	43	58	40	40
UNITED KINGDOM	6	10	16	11	11	3	16	14	22	15
	4	13	22	20	15	37	79	82	44	63

TABLE N° 7

KNOWLEDGE AND APPLICATION TO THE COMMANDMENTS RELATED SPECIFICALLY
TO WOMEN ACCORDING TO COUNTRY AND AGE BRACKET

CLERVICAL SMEAR

	15-24 YRS		25-39 YRS		40-54 YRS		55 YRS & OVER		OVERALL	
	KNOWN	APPLIED	KNOWN	APPL.	KNOWN	APP.	KNOWN	APP.	KNOWN	APPL.
WHOLE EC	62	24	86	63	78	53	69	27	75	43
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

BREAST CHECKING

	15-24 YRS		25-39 YRS		40-54 YRS		55 YRS & OVER		OVERALL	
	KNOWN	APPL.	KNOWN	APP.	KNOWN	APP.	KNOWN	APP.	KNOWN	APPLIED
WHOLE EC	79	39	90	81	87	59	79	39	84	50
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	90	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

MAMMOGRAPHY

	15-24 YRS		25-39 YRS		40-54 YRS		55 YRS & OVER		OVERALL	
	KNOWN	APPLIED	KNOWN	APP.	KNOWN	APP.	KNOWN	APP.	KNOWN	APPLIED
WHOLE EC	42	3	65	11	65	20	57	15	58	13
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

** INDICATE RESULTS TAKING THE SIZE OF THE SAMPLE INTO ACCOUNT

TABLE N° 8

SMOKING IN THE EUROPEAN COMMUNITY :
 ——— SMOKERS AND NON-SMOKERS ———

	NON-SMOKERS			SMOKERS			CIGARETTE SMOKERS		
	NEVER SMOKED	FORMER SMOKER	TOTAL	PIPE OR CIGAR	CIGA- RETTE		LIGHT SMOKERS	MEDIUM SMOKERS	HEAVY SMOKERS
WHOLE EC (1)	44%	19%	63%	3%	35%	37%	9%	20%	5%
BELGIQUE/BELGIE	51(4)	17	68	3	30	32	8	16	5
DANMARK	35	19	54	9	38	46	11	26	1
DEUTSCHLAND	46	18	64	4	32	36	5	21	6
ELLAS	46	11	57	1	42	43	8	19	15
ESPANA	48	11	59	3	39	41	11	19	7
FRANCE	40	22	62	3	36	38	13	19	4
IRELAND	48	19	67	2	31	33	6	21	4
ITALIA	47	20	67	1	33	33	13	17	3
LUXEMBOURG	49	16	65	3	32	35	8	17	7
NEDERLAND	34	22	56	4	41	44	11	24	5
PORTUGAL	56	11	67	.	32	33	6	21	5
UNITED KINGDOM	39	24	63	3	34	37	6	22	5

(1) Weighted average

(2) The total number of smokers may be a little lower than the sum : cigar or pipe smokers consuming tobacco in several different forms.

(3) Light smokers : less than ten cigarettes per day.
 Medium smokers : ten to twenty-four cigarettes a day.
 Heavy smokers : twenty-five or more.

The total light smokers + medium + heavy smokers is sometimes slightly lower than the total for cigarette smokers, as some smokers did not give details on their consumption.

(4) Including 12% don't knows.

GRAPH 2.

PROPORTION OF CIGARETTE SMOKERS IN THE POPULATION

(According to sex and age)

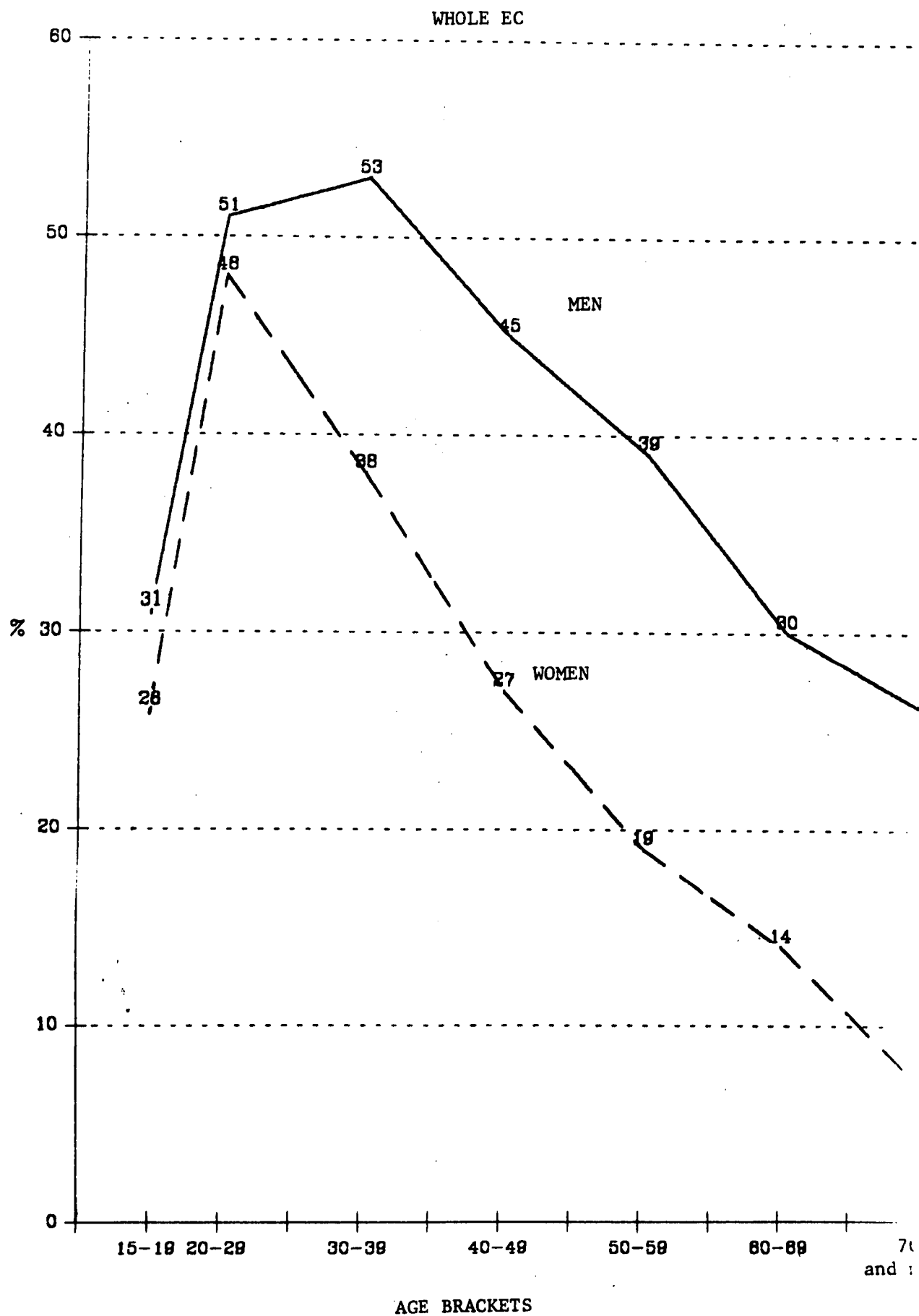


TABLE N° 9

CIGARETTES SMOKERS ACCORDING TO SEX AND AGE

(by country)

	MEN					WOMEN				
	15-24 YRS	25-39 YRS	40-54 YRS	55 YRS OR OVER	TOTAL MEN	15-24 YRS	25-39 YRS	40-54 YRS	55 YRS OR OVER	TOTAL WOMEN
WHOLE EC (1)	41%	52%	43%	31%	41%	39%	41%	24%	13%	29%
BELGIQUE/BELGIE	36	39	40	15	32	31	46	22	6	28
DANMARK	42	44	34	26	37	41	50	45	27	40
DEUTSCHLAND	38	58	38	28	40	28	45	29	11	26
ELLAS	58	71	67	48	61	39	44	16	8	25
ESPANA	61	64	60	26	53	49	50	9	6	26
FRANCE	53	52	46	32	43	49	38	17	8	29
IRELAND	32	40	34	27	33	30	28	31	25	28
ITALIA	33	48	40	31	38	32	41	20	16	28
LUXEMBOURG	19	38	39	35	35	34	35	26	17	28
NEDERLAND	37	52	45	36	42	49	46	36	23	39
PORTUGAL	60	69	50	28	52	30	22	6	1	14
UNITED KINGDOM	24	40	36	34	34	40	36	37	24	33

(1) WEIGHTED AVERAGE

TABLE 9bis

CORRELATION COEFFICIENT (R) BETWEEN RETAIL CIGARETTE PRICES (line 6) AND THE VARIOUS PROPORTIONS OF CIGARETTE SMOKERS (LINES 1 to 4)
 N.B. : THE SIZE OF SAMPLE APPEARS IN BRACKETS

	B	DK	D	F	IRL	I	L	NL	UK	GR	E	P	R
	%	%	%	%	%	%	%	%	%	%	%	%	
1. <u>TOTAL POPULATION</u>	(1010)	(992)	(993)	(1003)	(1005)	(1053)	(287)	(1004)	(1306)	(1000)	(998)	(1000)	
% smokers	29.5	38.3	32.4	35.9	30.7	32.8	32.1	40.7	33.8	42.4	39.2	31.9	-.18
of which heavy smokers	5.0	1.6	5.6	4.1	4.0	2.7	6.6	4.9	5.2	15.3	7.0	4.6	-.52
2. <u>MEN</u>	(471)	(482)	(459)	(483)	(498)	(520)	(149)	(496)	(627)	(484)	(482)	(476)	
% smokers	31.6	36.7	39.9	43.5	33.3	38.1	34.9	42.2	34.0	61.0	52.7	51.9	-.63
of which heavy smokers	5.1	1.5	7.6	5.2	5.6	4.4	11.4	6.9	6.5	27.9	11.8	8.8	-.56
2. <u>WOMEN</u>	(539)	(510)	(534)	(518)	(506)	(533)	(138)	(508)	(678)	(516)	(516)	(524)	
% smokers	27.6	39.8	25.9	28.8	28.3	27.6	29.0	39.2	33.6	25.0	26.6	13.7	+.58
of which heavy smokers	5.0	1.6	3.7	3.1	2.4	.9	1.4	3.0	4.1	3.5	2.7	.8	+.04
4. <u>15-24 yrs</u>	(185)	(189)	(184)	(196)	(244)	(211)	(47)	(214)	(256)	(190)	(220)	(219)	
% smokers	33.5	41.5	33.1	51.1	30.7	32.7	27.7	42.4	31.7	48.4	55.4	45.2	-.46
of which heavy smokers	5.9	1.1	6.5	2.6	1.6	.9	4.3	1.4	2.7	11.6	5.0	5.5	-.53
5. <u>TAXES</u> (in ECUs)	0.87	2.76	1.30	0.51	1.80	0.73	0.65	0.97	1.76	0.26	0.38	0.50	
6. <u>RETAIL PRICES</u> For 20 of the most common cigarettes (in ECUs)	1.24	3.16	1.77	0.68	2.54	1.02	0.97	1.36	2.53	0.43	0.73	0.73	

GRAPH N° 3

CORRELATION ENTRE PRIX DES CIGARETTES ET PROPORTIONS DE FUMEURS CHEZ LES HOMMES, LES FEMMES, ET LES JEUNES DE 15 A 24 ANS.

CORRELATION BETWEEN CIGARETTE PRICES AND THE PROPORTIONS OF SMOKERS AMONG MEN, WOMEN AND YOUNG PEOPLE AGED 15 TO 24.

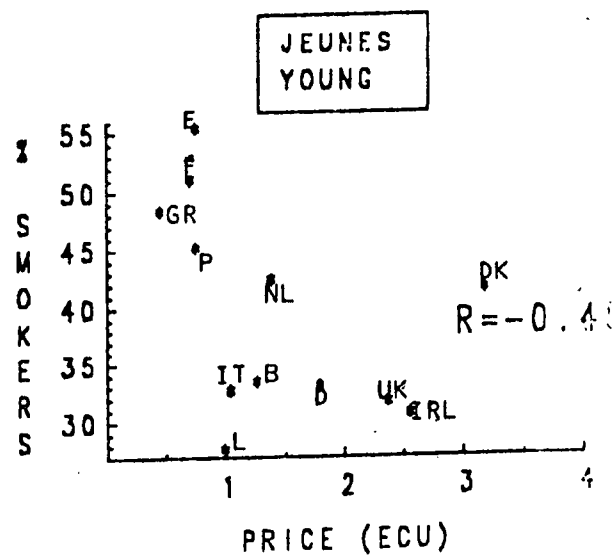
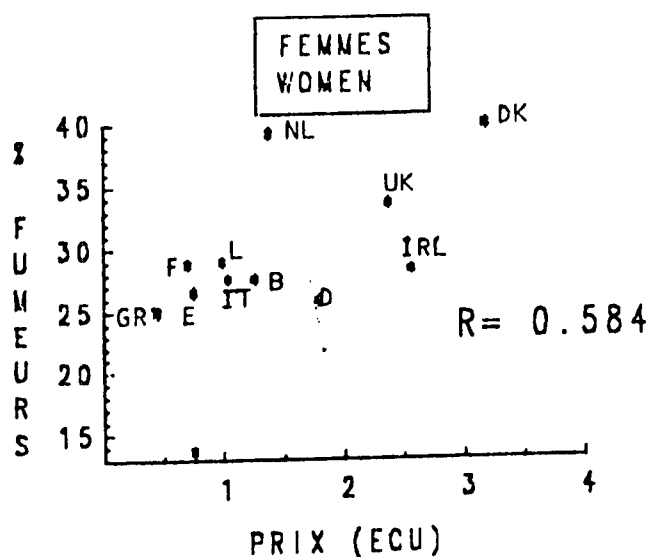
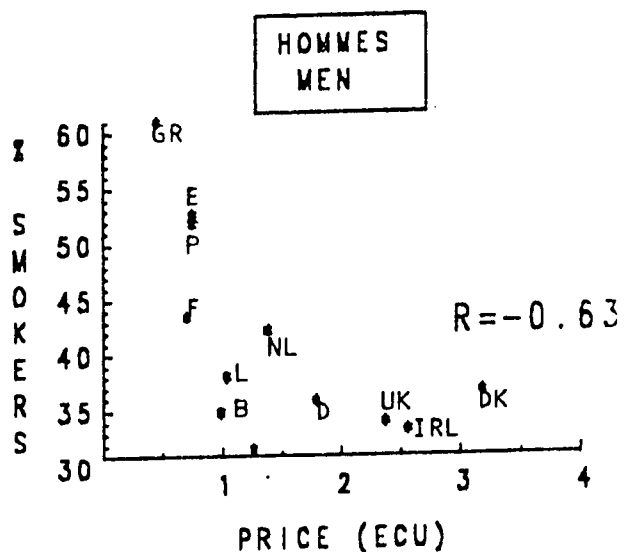
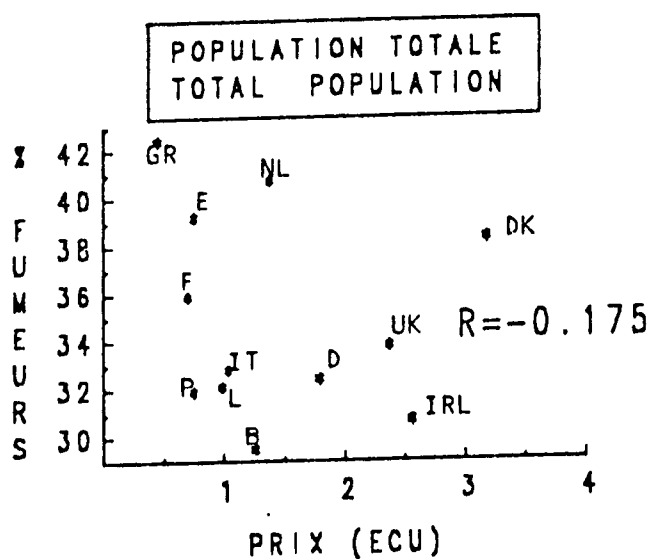


TABLE N° 10
THE DESIRE TO STOP SMOKING
(out of 100 smokers)

	STOP SMOKING	REDUCE CONSUMPTION OF TOBACCO	OVERALL
WHOLE EC (1)	27%	26%	53%
BELGIQUE/BELGIE	22	30	52
DANMARK	26	23	49
DEUTSCHLAND	9	29	38
ELLAS	31	29	60
ESPANA	30	25	55
FRANCE	31	26	57
IRELAND	34	26	60
ITALIA	36	28	64
LUXEMBOURG	25	30	55
NEDERLAND	21	23	44
PORTUGAL	30	33	63
UNITED KINGDOM	38	21	59

(1) WEIGHTED AVERAGE

TABLE N° 11

DO NOT SMOKE IN THE PRESENCE OF OTHERS

	DISTURBED BY OTHER PEOPLE'S SMOKE ...				
	A LOT	A LITTLE	NOT AT ALL	DON'T KNOW	TOTAL
WHOLE EC (1)	32%	30%	37%	1%	100%
BELGIQUE/BELGIE	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	32	44	-	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

(1) WEIGHTED AVERAGE

TABLE N° 12

THE OPINIONS OF EUROPEANS ON THE ANTI-SMOKING MEASURES PROPOSED BY THE EUROPEAN COMMISSION (1)

	INCREASED TAXES ON TOBACCO		BAN ON ADVERTISING OF TOBACCO		BAN ON THE SALE OF TOBACCO TO YOUNG PEOPLE UNDER 16		BAN ON THE SALE OF DUTY-FREE TOBACCO IN AIRPORTS ETC.		BAN ON SMOKING IN PUBLIC PLACES	
	+	?	+	?	+	?	+	?	+	?
WHOLE EC (1)	71%	5%	73%	6%	84%	4%	54%	11%	77%	19%
BELGIQUE/BELGIE	68	4	69	3	79	5	52	10	74	20
DANMARK	54	11	53	9	42	8	25	11	67	26
DEUTSCHLAND	59	7	67	9	80	6	44	10	56	36
ELLAS	71	4	79	5	79	4	64	8	78	18
ESPANA	69	7	69	10	86	4	54	28	78	16
FRANCE	82	2	75	4	78	3	58	10	91	8
IRELAND	66	6	78	5	93	2	46	9	69	26
ITALIA	82	3	84	4	86	4	71	10	93	5
LUXEMBOURG	67	27	75	12	86	5	62	19	65	28
NEDERLAND	67	28	58	8	70	6	39	9	69	24
PORTUGAL	75	16	77	11	89	6	67	14	82	10
UNITED KINGDOM	68	28	74	5	97	1	44	7	72	26

(1) Weighted average

The symbols +, -, ? correspond to the percentage of people questioned who would "approve", "disapprove" and who "did not know" respectively.

AVERTISSEMENT

CETTE ETUDE AUPRES DES PUBLICS EUROPEENS A ETE FAITE DANS LES DOUZE PAYS DE LA COMMUNAUTE EUROPEENNE PAR "THE EUROPEAN SURVEY", UNE SOCIETE COOPERATIVE REPRESENTANT UN GROUPE DE DOUZE INSTITUTS NATIONAUX MEMBRES DE "GALLUP INTERNATIONAL". LA COORDINATION INTERNATIONALE A ETE ASSUREE PAR MME HELENE RIFFAULT, "FAITS ET OPINIONS" (PARIS).

UN QUESTIONNAIRE IDENTIQUE D'UNE VINGTAINE DE QUESTIONS A ETE POSE A DES ECHANTILLONS NATIONAUX REPRESENTATIFS DES POPULATIONS AGEES DE 15 ANS OU PLUS, ENTRE LE 17 MARS ET LE 8 MAI 1987, EN SUPPLEMENT A L'EUROBAROMETRE 27. AU TOTAL, 11 651 PERSONNES ONT ETE INTERROGEES ORALEMENT A LEUR DOMICILE PAR DES ENQUETEURS ET ENQUETRICES PROFESSIONNELS.

LES NOMS DES INSTITUTS ET DES SPECIALISTES CHARGES DU TRAVAIL DANS CHAQUE PAYS, DE MEME QUE LES CARACTERISTIQUES TECHNIQUES DE L'ENQUETE, SONT MENTIONNES EN ANNEXE.

* * *

AINSI QU'IL EST D'USAGE POUR LES TRAVAUX DE RECHERCHE DE CE GENRE, NI LA FORMULATION DES QUESTIONS, NI LES RESULTATS PRESENTES, NI LES COMMENTAIRES N'ENGAGENT LA RESPONSABILITE POLITIQUE DE LA COMMISSION EUROPEENNE.

PRELIMINARY NOTE

THIS SURVEY OF EUROPEAN PUBLIC OPINION WAS CONDUCTED IN THE TWELVE COUNTRIES OF THE EUROPEAN COMMUNITY BY "THE EUROPEAN SURVEY", A CO-OPERATIVE COMPANY COMPRISING A GROUP OF TWELVE NATIONAL INSTITUTES WHICH ARE MEMBERS OF GALLUP INTERNATIONAL. INTERNATIONAL CO-ORDINATION WAS PROVIDED BY MRS HELENE RIFFAULT, "FAITS ET OPINIONS", PARIS.

AN IDENTICAL SET OF SOME TWENTY QUESTIONS WAS PUT TO REPRESENTATIVE NATIONAL SAMPLES OF THE POPULATION AGED 15 AND OVER BETWEEN 17 MARCH AND 8 MAY 1987 IN ADDITION TO THE EUROBAROMETER 27 SURVEY. IN ALL, 11,651 PEOPLE WRE INTERVIEWED IN PERSON, IN THEIR HOMES, BY PROFESSIONAL INTERVIEWERS.

THE NAMES OF THE INSTITUTES AND THE FIELD-WORK SPECIALISTS IN EACH COUNTRY ARE LISTED IN THE APPENDIX TOGETHER WITH THE RELEVANT TECHNICAL DETAILS ABOUT THE ENQUIRY.

* * *

IN ACCORDANCE WITH NORMAL PRACTICE FOR THIS TYPE OF RESEARCH WORK, THE EUROPEAN COMMISSION DISCLAIMS ALL POLITICAL RESPONSIBILITY FOR THE WORDING OF THE QUESTIONS, THE RESULTS PRESENTED AND ANY COMMENTARIES.

INSTITUTS CHARGES DU SONDAGE ET SPECIALISTES RESPONSABLES /
INSTITUTES WHICH CARRIED OUT THE SURVEY AND EXPERTS IN CHARGE (*)

BELGIQUE/BELGIE	DIMARSO N.V. 78 Boulevard Lambertmont B-1030 BRUXELLES	Patrick JANSSENS	Té1. 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	Té1. 451.29.88.00. Télex 055.15180. Telefax 451.18.24.66.
DEUTSCHLAND	EMNID-INSTITUT GmbH Bodolschwinghstrasse 23-25a D-4800 BIELEFELD 1	Walter TACKE Klaus-Peter SCHOEPPNER Franz KILZER	Té1. 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 Iliemachos DIB	Té1. 301.722.56.51. Télex 0601.215736 Telefax 301.722.02.55.
ESPANA	INSITTUTO DE INVESTIGACION GALLUP Calle Ayala, 6, 6° DCHA E-28001 MADRID	Jorge J. MIOUEL CALATAYUD Jaime MIOUEL ADRADA Luis PAMBLANCO	Té1. 341.431.07.46. Télex 052.42221. Telefax -
FRANCE	INSTITUT DE SONDAGES LAVIALLE 6-8 Rue du 4 Septembre F-92130 ISSY-LES-MOULINEAUX	Albert LAVIALLE Florence FABRE	Té1. 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	Té1. 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) Galleria San Carlo, 6 (Corso Europa) I-20122 MILANO	Ennio SALAMON Alfonso del RE	Té1. 392.782.217. Télex 043.43335161. Telefax 392.781.530.
LUXEMBOURG	INSTITUT LUXEMBOURGEOIS DE RECHERCHES SOCIALES (ILRES) 6, rue du Marché-aux-Herbes GD-1728 LUXEMBOURG	Louis MEVIS Edmée MEVIS Charles MARGUE	Té1. 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 WEIJLANDT Martin JONKER	Té1. 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	Té1. 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	Té1. 441.794.04.61. Télex 051.261712 Telefax 441.431.02.52.

Coordination Internationale/International coordination :
Hélène RIFFAULT - Jean-François TCHERNIA
FAITS ET OPINIONS
25, rue Cambon, F-75001 PARIS
Té1. 331.42.96.41.65 - Télex 214789 - Telefax 331.42.60.40.53.

STRUCTURE OF NATIONAL SAMPLES ACCORDING TO SEX AND AGE (1)

STRUCTURE DES ECHANTILLONS NATIONAUX SELON LE SEXE ET L'AGE (1)

	B	DK	D	GR	E	F	IRL	I	L	NL	UK	P
Total sample	1010	992	993	1000	998	1003	1005	1053	287	1004	1305	1000
Echantillon total												
of which												
Men/Hommes	471	482	459	484	482	483	498	520	149	496	627	476
15-24 yrs/ans	83	98	98	97	112	101	125	97	21	119	133	112
25-39 yrs/ans	144	141	109	133	136	104	134	136	47	135	162	130
40-54 yrs/ans	108	124	122	121	112	103	114	136	38	95	131	115
55 + yrs/ans	136	119	130	133	122	175	124	151	40	147	201	119
Women	539	510	534	516	516	518	506	533	138	508	678	524
15-24 yrs/ans	102	91	87	93	108	95	118	114	26	95	123	107
25-39 yrs/ans	169	141	124	135	127	198	131	145	37	179	230	146
40-54 yrs/ans	147	116	125	129	123	99	112	127	34	134	145	115
55 + yrs/ans	121	162	198	159	158	123	145	147	36	108	180	156

(1) Owing to a number of non-replies regarding sex and age, there may be some cases when there are very slight differences between the total number of persons interviewed and the total number of persons in such or such a category.

(1) Par suite de quelques non-réponses concernant le sexe ou l'âge, il peut y avoir dans certains cas de très légères différences entre le total des personnes interrogées et la somme de celles qui entrent dans telle ou telle catégorie.

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.

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° 27)	Dates (Euro-Baromètre n° 27)
	Milliers /Thou- sands	% CE/EC 10	% CE/EC 12		
B	7 924	3.64	3.12	1010	24/III-04/IV/1987
DK	4 133	1.90	1.62	992	06/IV-12/IV
D	51 466	23.62	20.26	994	20/III-14/IV
GR	7 715	3.54	3.04	1000	17/III-18/IV
F	42 851	19.67	16.87	1002	13/IV-29/IV
IRL	2 455	1.13	.97	1005	31/III-15/IV
I	44 438	20.39	17.49	1053	25/III-10/IV
L	300	.14	.12	287	13/IV-08/V
NL	11 400	5.23	4.49	1004	28/III-04/IV
UK	45 207	20.75	17.79	1306	02/IV-21/IV
CE/EC 10	217 889	100.00	85.77	9652	17/III-08/V
E	28 854	-	11.36	998	31/III-15/IV
P	7 314	-	2.88	1000	26/III-16/IV
CE/EC 12	254 057	-	100.00	11651	17/III-08/V

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.