

## **Risk perception of the Belgian population**

Results of the public opinion survey in 2006

Koen Van Aeken  
Catrinel Turcanu  
Gunter Bombaerts  
Benny Carlé  
Frank Hardeman

Society and Policy Support (SPS)  
Programme of Integration of Social Aspects into  
Nuclear Research (PISA)

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SCK•CEN  
Boeretang 200  
2400 Mol  
Belgium

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SCK•CEN  
Boeretang 200  
2400 Mol  
Belgium

© SCK•CEN  
Belgian Nuclear Research Centre  
Boeretang 200  
2400 Mol  
Belgium

Phone +32 14 33 21 11  
Fax +32 14 31 50 21

<http://www.sckcen.be>

Contact:  
Knowledge Centre  
[library@sckcen.be](mailto:library@sckcen.be)  
[benny.carle@sckcen.be](mailto:benny.carle@sckcen.be)

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SCK•CEN, Studiecentrum voor Kernenergie/Centre d'Etude de l'Energie Nucléaire  
Stichting van Openbaar Nut – Fondation d'Utilité Publique - Foundation of Public Utility  
Registered Office: Avenue Herrmann Debroux 40 – B-1160 Brussel  
Operational Office: Boeretang 200 – B-2400 Mol

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## Executive summary

The SCK•CEN 2006 risk perception barometer is based on over 1000 Computer Assisted Personal Interviews, with a duration of 35 min on average, taken from persons selected to be representative for the Belgian 18+ population, and all realized in the period March 21st –April 12th 2006.

Historically this barometer draws on the French IRSN Baromètre (1988): SCK•CEN carried out a previous version in Belgium in the autumn of 2002. Most questions however were not repeated in the 2006 edition, but new topics were broached instead. The questions are presented as statements, with respondents stating agreement on a five points Likert-scale (strong disagreement, disagreement, undecided, agreement, strong agreement), and allowing a "no answer/don't know" category when explicitly asked.

In this barometer, we added a large section to analyze the context of an individual's risk perception. Besides the classical background variables used to obtain the quota for representativity (age, language, habitat, gender and social class), we also included a series of questions assessing the sociological context and the psychological personality profile.

### Risk perception and trust in authorities

Traditionally, in the first part of the questionnaire interviewees were asked to evaluate risks for 19 domains. A variation of this question is asked every year since 1988 in the French IRSN barometer, and they observed only small evolutions in the results. In our survey we changed the question from the non-specific "*evaluate the risks in general (for Belgium) for each of the following domains*" to a more specific "*evaluate the risks for an ordinary citizen of Belgium for each of ...*". The absolute figures of the risk perception drastically dropped (30 to 40 % lower) for domains such as terrorism, chemical or nuclear waste or accidents in installations and terrorism compared to 2002, while for domains such as drugs, traffic accidents, environment pollution or traffic accidents they remain high.

For the same 19 domains, the confidence in authorities was enquired, in exactly the same wording as in 2002. "Please state how much confidence you have in the authorities for the actions they undertake to protect the population for each of the following items". For the categories showing a decrease in risk perception (terrorism, chemical or nuclear waste or accidents), we see the confidence in authorities growing with 15 to 20%; for road accidents and drugs the confidence also rose considerably with around 10%.

In general we observe a clear overall rise in the confidence in authorities. This is especially high in domains such as tobacco use, car accident, bird flu or a large scale flu epidemic, in other words all domains where the Belgian authorities were often in the media with new actions or programs to reduce the risks.

### Perception of 'the nuclear'

Comparing the 'nuclear' risk/trust items with the 'chemical' items, we observe in 2006 a marginally lower risk perception and a higher trust in the authorities for the nuclear, and this for all domains (risk perception for accidents, waste or terrorist attacks). We may thus conclude that speaking of a 'generalized high fear for nuclear activities' is not supported by this barometer.

Opinions on nuclear energy are further enquired in a more general series of questions on people's attitude and expectations on energy. The 66% majority supporting the 'reduction of

nuclear power stations in Europe' in 2002 diminished to 51 % (while disagreement rose from 12 % to 24%). The statement that "NPP irrevocably endanger the future of our children" was agreed by 37% (in 2002 47%) while opposed by 36 % (in 2002 24%), both results illustrating the shift towards a wider acceptance of nuclear power for energy production.

A very large majority agrees that "keeping the option for NPPs open to be less dependant on some countries will be necessary" (63% vs 13%) and a comparable majority thinks that "wind and solar energy will be insufficient to compensate for the shutdown of NPP's" (63% vs 18%).

More than 90% think that "higher energy prices in the future will impose a more economical use of energy", nearly 60% expresses "to be willing to give up some comfort to save energy (driving less often the car, lowering the heating,...)" and over 40 % say they are "willing to invest seriously to save energy (e.g., installation of solar water heating)".

Support for nuclear research rose from 46% in 2002 to 75% of the population in 2006 (disagreement dropped from 24% in 2002 to 9 % in 2006).

### **The Chernobyl accident**

The barometer survey was carried out before the media reported exhaustively on the 20 years anniversary of the Chernobyl accident. Over 90% of the respondents believe that there are still problems with the radioactive contamination in the former SU, that children from affected regions suffer from health problems and that there were more birth defects after the accident. 40 % of the Belgians believe that the number of cancers in Belgium increased due to the Chernobyl accident (vs 20% disagrees).

Nearly 50% disagrees with the statement that the international scientific reports tell the truth (vs 27% agrees), and an even larger majority disagrees with the statement "the Belgian authorities have always told the truth during the Chernobyl crisis" (nearly 60% vs 13% agrees).

More than 44% thinks an accident as serious as Chernobyl can happen in Belgium (vs 28% thinks it cannot happen), but more than 77% agrees that the Belgian NPP's are technically superior to the ones in the former SU.

### **Radioactive waste disposal**

We asked questions related to the acceptance of the underlying assumptions in the current nuclear waste management policy. 75% of the respondents agrees that the local population should participate in the decision process regarding a waste disposal siting (vs 10% disagrees); 70% agrees that this region should receive economic compensations and over 50% agrees that these are to be paid by all electricity consumers (vs 24% disagreement).

On the type of waste disposal solution, the opinions are ambiguous: large majorities (over 70%) agree that we have to make a difference between the types of waste according to the risks, and that low radioactive waste asks for another approach than high radioactive waste. However 60% would rather have them both in a deep underground disposal (vs 21% disagrees), despite the wide consensus on the necessity for retrievability (over 60%).

This ambiguity is also illustrated by the large acceptance of two 'opposing' statements: nearly 55% agrees that "Belgium is too densely populated to build a nuclear waste disposal site" (vs 19% disagree) and the same majority agrees that "it is unacceptable that Belgian nuclear waste is exported for disposal abroad" (vs 23% disagree).

On questions on the long-term safety of a surface repository for low level radioactive waste, a small majority questions the safety (34% disagree that it is possible to guarantee safety vs around 26 % agree).

## **Food safety and acceptance of management options after an accidental radiological contamination of the food chain**

The largest part of the 2006 SCK•CEN risk barometer concerned food safety and acceptance of management options after accidental contaminations of the food chain. This part supports recent research in the DSR (currently SPS) department: the emergency preparedness stakeholder processes set up in the 5th and 6th framework research projects, the work in the Belgian emergency exercises and the current multi-criteria decision-aid theory work.

In this part we enquired on the acceptance of food legal norms in general (content, enforcement and legitimacy), and the opinions on specific management options in case of a limited scale contamination.

Maximum permitted radioactivity levels for marketed food products, also called European Council Food Intervention Levels - CFIL – (CEC, 1989), have been laid down by the European Union and are adopted by the Belgian legislation, as well. In this barometer such values have been simply referred to by the general term "legal norms".

The main research questions addressed were: public acceptance of various management options for contaminated milk (assessed individually for each of them) and associated consumer's behaviour. The management options discussed were food ban with destruction of all contaminated milk, clean feeding, administration of feed additives to the dairy cows (in order to reduce the transfer of some radionuclides to milk), processing of milk to products with low activity retention factor (butter, cheese) and dilution of contaminated milk with clean milk.

The acceptability of different management options for contaminated milk was investigated for two hypothetical situations: i) raw milk exceeding legal norms, in case no action is undertaken; ii) raw milk expected to remain below the legal norms, even in the case of no action. In the first situation, the best accepted management options are clean feeding (71% in favour, from which 31% strongly agree) and food ban (68% in favour). Quite highly accepted is also the slaughter of dairy cows, for the case of a long lasting contamination (63% in favour). For feed additives and processing of milk, there is no clear tendency in either direction of preference: about 40% of the respondents are against and only slightly more than 40% in favour. The overwhelming majority (75%) disagrees with dilution of contaminated milk with clean milk.

In the second situation, i.e. milk contamination not expected to exceed the legal norms, clean feeding as a measure for preventing any contamination of milk enjoys again a high acceptance among the respondents (71% of the respondents in favour, from which 33% strongly agree). The general acceptability of destroying all contaminated milk decreases compared to the first situation, 45% being against it; nevertheless, more than one third of the respondents (40%) agree with this radical option. As in the previous situation, feed additives and processing of milk lie in the middle and are comparable as acceptability, yet with a certain preference bias in favour of feed additives (47% in favour vs 33% against for additives, respectively 39% in favour vs 42% against, for processing). The dilution of contaminated milk is once more strongly opposed (69% disagree).

The results also show a tendency towards a precautionary approach. Indeed, more than 80% of the persons interviewed consider that contamination should be reduced as much as possible, even if already below the legal norms. In this questionnaire, the "cost" of such a policy being vague, respondents largely demanded the highest precaution on top of the legal norm implementation. On the other hand, results suggest that a majority of respondents think that food contaminated above legal norms should not be further processed to decrease the contamination, but simply disposed of. Moreover, less than 30% of the respondents consider



that it is acceptable to consume products above the legal norms, even if the experts ensured there were no health risks.

In order to assess the consumer's behaviour against the background of particular management options, the respondents were asked to pick one of five possible choices: stop buying milk or dairy products; deciding whether to buy local or imported products depending on the price; buying local products; buying imported products or don't know/no answer. Confirming the large acceptance noticed for this management option, in case of clean feeding more than 60% of the respondents would continue to buy the local products. This is followed – with a large gap – by the feed additives option, for which less than 40% would still choose buying the local products. Contamination below the norms makes more than one out of two people decide to buy imported products or to stop buying these products, although from the acceptability point of view, the normal consumption of such products counted only 22% against vs. 58% in favour. The mere notions of radioactivity and contamination appear to have a negative impact on the trust in the authorities which set the legal limits. Dairy products in excess of the norms are considered taboo by two thirds of the population, just as dairy products below the norms, but originating from raw milk in excess of legal norms. It is interesting to notice that although price is considered as an important factor by more than 70% of the respondents for marketed food products in general, it seems to play little role in the consumer's behaviour after a contamination of the food chain: not more than 10% would take their decisions depending on the price of such products, for any of the management options considered.

The stability of the opinions was tested using a "Television News Bulletin" – alike video communication, in order to get better situational empathy of the respondents. Results show that the expert communication, either with a slightly positive or a negative undertone, had only a very small effect on the results, although in the expected direction.

Looking from the perspective of both intrinsic acceptance and consumer's behaviour, it appears that people favour a precautionary policy, aiming at preventing any contamination in the food chain. In terms of management of contaminated milk, this upholds options like clean feeding and food ban with destruction of all contaminated foodstuff. Feed additives can be a complementary option in case of a larger scale or longer time contamination, but presumably this would lead to a significant decline in the consumption of local products. Milk processing would have to count on a very limited market segment, whereas dilution of milk is strongly opposed in any circumstance.

Further analysis is now under course and the results will be reported elsewhere.

## 1 The Belgian Risk Barometer 2006

In 2002, the SCK•CEN has conducted an opinion survey among a representative sample of the Belgian population. The results gave rise to the so-called risk barometer (Carlé, 2003; Carlé and Hardeman, 2003; see also <http://www.sckcen.be/pisa>). The focal points were the perception of risks, the opinion on nuclear activities, the emergency planning, the trust in risk regulators and experts, and the knowledge of institutions.

The ever changing societal context, including the rise of strongly mediated concerns, such as food safety and the avian influenza, and presumed opinion changes on various matters substantiated the need for a replication of the original barometer. In March and April 2006, a number of 1063 Belgian adults were successfully interviewed with regard to a range of risk-related topics. Special care has been taken to avoid media effects regarding the 20<sup>th</sup> anniversary of the Chernobyl accident: the interviewing started on March 21 and was finished on April, 11. Media coverage on Chernobyl was marginal in that period and skyrocketed only two weeks later, around the actual date of the accident, April 26.

A number of questions of the 2002 survey reappeared in the 2006 questionnaire in order to sketch possible trends or opinion shifts. However, the new edition of the barometer has undergone some important changes. Firstly, the current survey addressed a number of new topics and themes. Secondly, considerable attention has been paid to methodological issues. Finally, the new survey is unique in its kind since it includes an experimental design incorporating simulations of news broadcasts with regard to a fictional nuclear contamination.

The project team was expanded beyond the SCK•CEN members through a temporary collaboration with the University of Antwerp.

The questionnaire at the core of the survey consisted of six parts (see Fig. 1). Parts A, B and C contain the questions related to the target variables, while parts S, SO and P hold questions on explaining variables. In Fig. 1, italicized titles refer to the supporting variables, that is, variables of an explaining nature. This report deals only with the main topics of the survey as found under the headings A, B, C, D and E, and for the sake of bivariate analysis, part S. The sociological and psychological sections are not discussed in this report, since these were introduced to allow for more in-depth, multivariate analyses which ought to find their way to upcoming articles in the international body of specialized scientific literature.

As illustrated in Fig. 1, the questionnaire starts with a number of questions trying to obtain a general picture of the respondents' background (Part S). The second part addresses the risks and the population's confidence in the management of those risks as carried out by the authorities (Part A). A third part concerns food safety under different conditions (Part B). Since these questions are rather difficult and demand great attention of the interviewee, we decided to intermingle some easier questions, namely a short list of questions which try to assess the social capital (Part SO) and the personality profile (Part P). The last parts deal with some general topics regarding energy provision (part C), radioactive waste (part D) and the Chernobyl accident (part E).

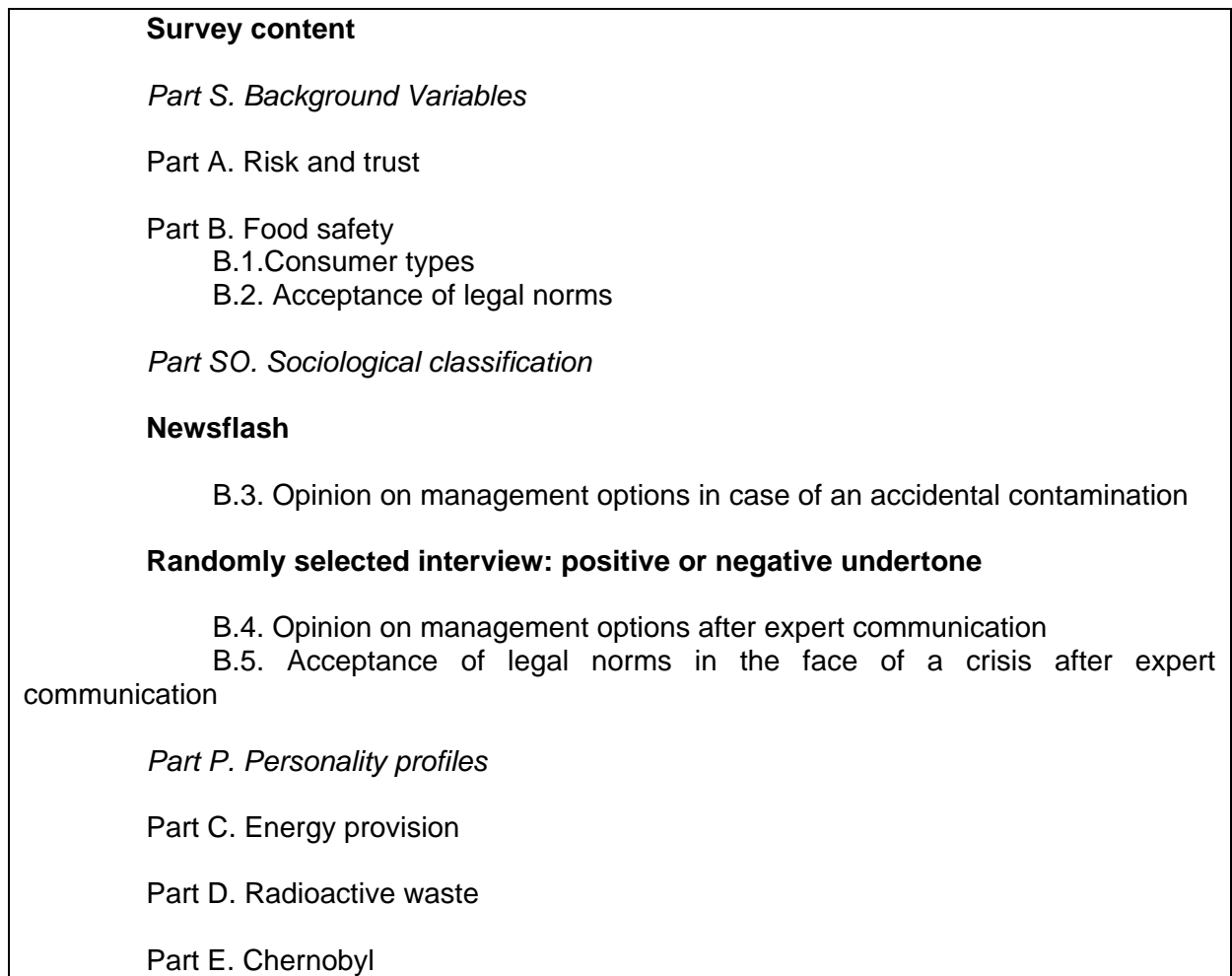


Fig. 1 Topics of the questionnaire

## **2 Methodology**

### **2.1 Sampling**

As in the previous edition, the actual field work was subcontracted to a commercial research firm. The Antwerp based market research bureau ASK has won the tender. Collaboration was smooth and professional, resulting in highly reliable data. The interview method employed was the same, namely Computer Assisted Personal Interviewing (CAPI), which refers to face-to-face interviews at the home of the respondent, the answers being directly recoded and stored on a portable computer's hard disk.

In order to ensure a good ratio between price and quality, a three stage sampling procedure was applied. First, stratification has been made by cross-tabulating the 11 provinces with the 4 levels of urbanisation. This resulted in a matrix consisting of 37 cells (and not 44, since, for instance, some provinces don't have large cities). In a second stage, an aselect sample of communities was drawn for each of these cells. Finally, the interviewers selected at random dwellings in the 109 resulting communities, and organised their interviews in such a way that a number of predefined quota were respected: gender, age (divided in three categories), professionally active (to ensure that the proportion of retired persons taking part in the survey does not exceed the national level) and social class (for the latter one, only the representativity of the two highest classes was checked, since these classes are often underrepresented in surveys). All in all, this means that the survey is representative for Belgium for the following variables: province, region, gender, age (in 3 strata), level of urbanisation and professionally active status. As pointed out, the highest social classes are not underrepresented.

### **2.2 Questionnaire items**

Most questions are presented as statements, to which the respondent can answer on a five points Likert-scale (<strong disagreement, disagreement, undecided, agreement, strong agreement>), plus a sixth category (<no answer/don't know>). We deliberately chose not to force people to express an opinion by offering an even number of answering alternatives. On the other hand, while the sixth option (no answer or don't know) was always open to the respondents, the interviewers were instructed to not suggest this answering category too explicitly. The option for a five-points scale with a partially 'masked' DK/NA category may ultimately be superior to the forced answering approach (Shuman; Presser, 1996: pp. 113 and following).

Since a number of questions deal with the context of a radioactive contamination in the food chain, whereas a multitude of other questions concern opinions on the regular functioning of the nuclear scene, the ordering of the items is especially relevant. The proposed order should cause the least possible bias in the answers. The Chernobyl and waste questions are located after the energy questions; these three themes are located in the tail of the questionnaire, as far away as possible from the part on a nuclear contamination that may have a strong impact due to the use of video. This has the added advantage that the theme of nuclear and the initiator of the survey are not displayed too openly from the beginning- the survey goes well off the beaten track of nuclear-related issues.

To avoid question-order effects, questions were posed in a randomized way to the respondents whenever this was thought useful. For instance, the order in which the 19 risks were presented to the people was randomized through the CAPI-software employed. Rotation of answering categories was applied to minimize response-order effects, e.g. in the case of the questions on knowledge of the Chernobyl accident. Response-set (an unconscious answering pattern in a certain direction, e.g. always <yes> or <agree>) was countered by a balanced use of positive and negative statements, so that 'automatic' answering was not an option. Moreover, the tone and wording of the questions have been examined thoroughly to inflict the least possible bias in the respondents' reactions (see, e.g. Schuman; Presser, 1996; Glendall and Hoek, 2005).

### 2.3 Variables

Another important note concerns the construction of variables. Contrary to the bulk of opinion studies that are carried out today, we made an effort to not rely exclusively on single items for the analyses. Instead, whenever possible, we tried to construct summated scale variables consisting of various items. These items may have their origin in sociological or psychological theory (see the operationalization of respectively social capital and personality traits) or in knowledge-through-experience (in SCK•CEN related areas, like waste or Chernobyl). The use of multiple items not only increases the robustness of a variable in terms of reliability, but also enhances the measurement level, so that we may work on the (pseudo-) interval level, opening up the research perspective to a much wider scope of methods and techniques. For every variable, a number of single questions (items) are conceived under the form of Likert scales (see, e.g., Neuman, 2004). The empirical data will determine whether the *a priori* conception of the variables is valid (there was no time for a pilot study). The formal tests are the calculation of Cronbach's alpha ( $> 0,70$ ) to assess the reliability of the scale (is the measurement reliable?) and, in second order, factor analysis (are the various items constructing components of one, unidimensional construct?). If the various items are measuring indeed a one-dimensional construct (variable), the values for these items are simply added, so that one scale is obtained. Due to the exploratory nature of this report, this overview refrains from combining all relevant items into summated scale variables; only a selection of summated scale variables is presented, such as 9 (or 7)-item variable *norm acceptance*. For instance, the 7 items that ultimately constitute 'norm acceptance' have values from 1 tot 5 (encoded as <strongly disagree> to <strongly agree>). The resulting scale thus ranges from 7 to 35. A simple transformation, conducted by subtracting 7 from this sum, makes the scale start at zero and reach its maximum value at 28<sup>1</sup>. While this procedure may be time-consuming and labour-intensive, demanding a great deal of desk research and preparation, the variables constructed in this way are characterized by superior reliability and

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<sup>1</sup> These values can, in turn, be encoded in different ways. A common way is to fix the category borders at the 20<sup>th</sup>, 40<sup>th</sup>, 60<sup>th</sup> and 80<sup>th</sup> percentiles of the distribution, creating five categories which can be labeled <very low> to <very high>. E.g., the first category contains the respondents that provided the 20% lowest values for the variable. This encoding is easy to work with if crosstables are drawn, since they provide sufficient 'fillings' for each cell. An alternative is to divide the range of the scale in five equal parts, so that the category classes can be predefined as  $[0 - 28/5[$ ,  $[28/5 - 28*2/5[$ ,  $[28*2/5 - 28*3/5[$ , ... $[28*4/5 - 28]$ . A disadvantage of this method is that the upper and lower classes contain considerably less cases since respondents tend to fall *en masse* in the middle categories, considering that the normal distribution is in effect in most opinion-related matters. This often leads to difficulties with crosstabulation since some cells do not contain sufficient cases.

validity. At present, scrutinizing the quality of empirical research in the field of the humanities often equals an examination of the way more complex concepts are operationalized into variables (t Hart e.a., 1998:161 and beyond).

## 2.4 Confidence level

An important aspect in interpreting parameters from a population sample relates to the confidence level attached to the data. Throughout this report, a confidence level of 95% is observed. Keen on preserving the readability of this report, we refrain from adding confidence intervals to the estimated values of the variables (items or constructs). Nevertheless, we can generally say that the error margin for all estimated proportions (e.g. the proportion of people saying they evaluate the risk for cancer as very high) is 3%. This value is derived from the familiar estimation of the error margin:

$$m = z^* \sqrt{\frac{p^* \cdot q^*}{N}}$$

with  $m$  = the error margin in percentage points;  
 $z^*$  = 1.96 (according to the normal distribution if the confidence level equals 95%);  
 $p^*$  = the sample proportion of the category involved, e.g. <very low>;  
 $q^*$  = the complement of  $p^*$  =  $(1-p^*)$  = the sample proportion of the categories not involved;  
 $N$  = the sample size.

A simple example, drawn from the questions regarding risk perception and more particular regarding cancer (RA 1), can illustrate this.

The proportion of the sample expressing a very high risk perception of cancer is about 26,3%, which sets the conservative value for  $p^*$  at 0,27. Its complement  $q^*$  thus equals 0,73.  $N$ , the total sample size equals 1063. The error margin is then easily computed as

$$m = 1,96^* \sqrt{\frac{0,27 \cdot 0,73}{1063}} = 0,0267.$$

With 95% confidence, we know that the population value for the proportion of people holding a very high risk perception of cancer is situated in the interval  $[27\% - 2,67\%; 27\% + 2,67\%]$  or  $[24.33\%; 29.67\%]$ <sup>2</sup>.

Of course, the value for  $m$  may differ due to changes in  $p$ ,  $q$ , or  $N$ . The following table lists some possibilities. Since  $N$  exceeds 1000 in our barometer, especially the last line is relevant:

<sup>2</sup> A 95% confidence interval around a parameter should be interpreted as follows: if one draws 100 times a sample of the same size out of the same population and estimates a certain parameter, then the true (population) value for this parameter will be in 95 of the times in the calculated confidence interval.

N \ p	observed frequencies or proportions (%)													
	1 or 99	2 or 98	3 or 97	4 or 96	5 or 95	10 or 90	15 or 85	20 or 80	25 or 75	30 or 70	35 or 65	40 or 60	45 or 55	50
50	2,8	3,9	4,7	5,4	6,0	8,3	9,9	11,1	12,0	12,7	13,2	13,6	13,8	13,9
100	2,0	2,7	3,8	3,8	4,3	5,9	7,0	7,8	8,5	9,0	9,3	9,6	9,8	9,8
200	1,4	1,9	2,4	2,7	3,0	4,2	5,0	5,6	6,0	6,4	6,6	6,8	6,9	6,9
300	1,1	1,6	1,9	2,2	2,5	3,4	4,0	4,5	4,9	5,2	5,4	5,5	5,6	5,7
400	1,0	1,4	1,7	1,9	2,1	2,9	3,5	3,9	4,2	4,5	4,7	4,8	4,9	4,9
500	0,8	1,2	1,5	1,7	1,9	2,6	3,1	3,5	3,8	4,0	4,2	4,3	4,4	4,4
600	0,8	1,1	1,4	1,6	1,7	2,4	2,9	3,2	3,5	3,7	3,8	3,9	4,0	4,0
700	0,7	1,0	1,3	1,5	1,6	2,2	2,6	3,0	3,2	3,4	3,5	3,6	3,7	3,7
800	0,7	1,0	1,2	1,4	1,5	2,1	2,5	2,8	3,0	3,2	3,3	3,4	3,4	3,5
900	0,7	0,9	1,1	1,3	1,4	2,0	2,3	2,6	2,8	3,0	3,1	3,2	3,3	3,3
1,000	0,6	0,9	1,1	1,2	1,4	1,9	2,2	2,5	2,7	2,8	3,0	3,0	3,1	3,1

This means that the maximum error margin (in percentage points) to an estimation in this report will never exceed 3.1. In our example, the margin was 0,0267 or 2,67%. While this is very reasonable, caution is due if low percentages of a certain category are examined. If, for instance, a mere 3% of the sample falls into a certain category (like <disagree strongly>), the confidence interval stretches from 0% to 6.1%.

To overcome this problem, a theoretical way out would be to increase the sample size. One can easily derive from the formula that an increase of N leads only to a minimal effect in error margin: if N is multiplied by f, we notice from the formula above that m decreases by  $\sqrt{f}$ . For example, if N would be twice as big in our research project, the maximal error margin would be  $3,1/\sqrt{2} = 2,19$ . In budgetary terms, this means that multiplying the cost for interviewing by opting for a larger sample implies that only the square root of the multiplication factor is gained at the level of estimation error reduction. This reasoning explains why the project team has decided to ask the field research partner to draw a sample size of around N = 1000. At this level, an excellent relationship between the cost for the survey and the error margin is obtained.

## 2.5 Testing the statistical significance of dependency between two variables

An important issue in social-scientific research is the question if two variables are related to each other. Testing the statistical dependency, that is conducted several times throughout this report, has been carried out with the  $\chi^2$ -test. E.g., is gender linked to risk perception of cancer? In other words, is the perception of the risk in question dependent of gender? To answer this particular question and all questions alike, the following method was deployed. Both variables, the dependent (risk perception) and the independent (gender) are placed into a contingency table that displays the distributions of respondents over the categories for each of the variables. Where categories of the dependent and the independent variables cross, a cell is

formed. Working with contingency tables is often referred to as crosstabulation or as calculating 'breaks' or 'cuts'. The following table displays the distribution of respondents over such a contingency table.

<b>GENDER</b>			
<b>RISK</b>	<b>male</b>	<b>female</b>	<i>sum (marginals)</i>
<b>low</b>	<b>21</b> 4,14 %	<b>16</b> 2,89 %	37 3,49 %
<b>average</b>	<b>142</b> 28,01 %	<b>120</b> 21,66 %	262 24,69 %
<b>high</b>	<b>344</b> 67,85 %	<b>418</b> 75,45 %	762 71,82 %
<i>sum (marginals)</i>	507 100 %	554 100 %	N = 1061 100 %

Crosstabulation (or calculating 'breaks') presents itself as the first step in analyzing associations (relationships) between categorical variables. Since the majority of items and variables in our questionnaire have predefined answers in the form of a small number of categories, the number of cells in a table rarely becomes very large. For the sake of this illustration, however, we recoded the values for risk perception to three categories<sup>3</sup> instead of six. The number of columns or categories for the variable 'gender' is two, which generates a 2\*3 table containing six original cells.

A first glance reveals immediately that women fear (the risk of) cancer more than men do. Indeed, out of 554 females, an astonishing 418 expresses a high risk perception. In proportional terms, this means 75,45 % of all surveyed women. Likewise, 67,85 % of men consider cancer to be a high risk. Due to the specific construction of the table, these percentages can be easily compared: while 75% of women perceive cancer as a high risk, only 68% of men do so.

These percentages are, of course, nothing but estimates from a sample. Is it now possible to generalize the discovery that women estimate the risk of cancer to be higher than men do; in other words, can this finding be extended from the sample to the population? Or are both observed percentages (and the observed difference) a mere coincidence, due to sampling errors, a lucky shot generated through this particular sampling effort? At this point, a Pearson  $\chi^2$ -test of independence fulfils all the conditions to provide an answer to this important question. The test in itself is a test of the null hypothesis that no dependency exists between the two variables. If one can reject the null, this means that there is a dependency between the variables, so that we can talk about an association<sup>4</sup> or a relationship,  $\chi^2$  in itself is a measure for the dependency between two variables. If two variables are independent,  $\chi^2$  equals zero. If a dependency exists,  $\chi^2$  differs from zero, but its upper value is not known since the measure is not standardized or even limited. The computed value for  $\chi^2$  can subsequently be

<sup>3</sup> Low contains <very low> and <low>; Average stays the same and High is the sum of the categories <high> and <very high>. The category <don't know/no answer> contained only 2 persons, which were dropped from the sample. The sample size is therefore reduced to 1061.

<sup>4</sup> Association is the correct term for dependency on the level of categorical variables; the term correlation is reserved for relationships between quantitative variables.



compared to the critical value for  $\chi^2$ , written as  $\chi^{2*}$ . This value can be found in the pre-calculated distribution of  $\chi^2$ . If  $\chi^2 > \chi^{2*}$ , the observed dependency is statistically significant at the designated significance level. In other words, the observed association exists also in the population.

The first step is the calculation of  $\chi^2$  as the sum of all the  $(f_o - f_e)^2/f_e$  in which  $f_o$  stands for the observed frequency, and  $f_e$  is the expected frequency for each cell. The expected frequency is easily calculated on the basis of the marginals (subtotals) of the contingency table. E.g., the expected frequency for cell (1,1) is  $(37/1061)*507$ , or 18 rounded, whereas the observed frequency is 21.  $(f_o - f_e)^2/f_e$  equals thus  $(21-18)^2/18 = 0,5$ . This is consequently repeated for all cells of the table, so six in our example. Large gaps between observed and expected frequencies push the value of  $\chi^2$ , indicating that the distribution of respondents over the table does not merely flow from the marginals but instead

Finally, the calculated  $\chi^2$  is compared to the critical value as listed in the precalculated  $\chi^2$  table, whereby the number of degrees of freedom of the contingency table at stake is taken into consideration. The degrees of freedom are  $(r-1)(c-1)$  where  $r$  is the number of rows and  $c$  the number of columns. In our example, the critical value for  $\chi^2$ , with  $(3-1)(2-1)$  degrees of freedom is 5,99, which is less than the calculated 11,2. This means that we can reject the null hypothesis that there is no dependency between the variables gender and risk perception of cancer. In other words, risk perception depends on gender! The statistical package SPSS now offers by default the significance level of the association: in our case, it is 0,049. This basically means that there is a probability of less than 0,05 (95% confidence) that the association between gender and risk perception as observed in our sample, is present in the sample but not in the population, or, in other words, that the association is due to pure chance. We may thus conclude that, taking a confidence level of 95% into account, the relationship between gender and risk perception of cancer may be generalized to the population.

The  $\chi^2$  statistic must be used with care. Although no association is indicated by a zero, a perfect association is not indicated by a 1.00. Moreover, the size of  $\chi^2$  is influenced by both the size of the contingency table and the size of the sample.

The addition of rows and columns as a table grows is accompanied by larger and larger values of  $\chi^2$ - even when the association remains essentially constant. If the sample size is tripled, the value of  $\chi^2$  is tripled, and everything else remains the same. Therefore, the value of  $\chi^2$  is used as a test statistic of independence. If the null hypothesis of independence is rejected, we will then proceed with interpreting the contingency table manually to describe the associations between the variables at stake. This method has the added advantage over the use of a single denominator for association (like a Pearson correlation coefficient or any other measure of association like Somers D, e.g.) that no information is lost in the reductionist calculating process to come to the measure of association. Indeed, the listed table tells a lot more than just one figure like a Goodman and Kruskal tau of 0,03 or a Lambda of 0,027, associations which are so low that one would be inclined to deny a possible relationship. And while the relationship between gender and risk perception of cancer only appears in the sphere of the higher risk perceptions, the analysis of the contingency table points towards the socially relevant fact that women are slightly more prone to a high risk perception of cancer than men do.

Caution must be exercised when interpreting the values of a  $\chi^2$ . It does not offer a measure for the strength of the association, since its value is dependent of  $f_o$  and  $f_e$ . Tables with large cell counts (high number of respondents in cells) will yield bigger  $\chi^2$  values than tables with smaller counts. One can see in the definition that  $\chi^2$  is not standardized, an elementary condition for comparison. However,  $\chi^2$ -values may be compared when calculated in similar conditions. If  $\chi^2$  is calculated for different tables which nevertheless contain the same number of respondents and which count an equal number of likewise categories for both the dependent and the independent variable, the resulting values for  $\chi^2$  may be compared. As such, it is possible to compare these values within one column of the crosstabulation overview reports which are found adjacent to the graphical representations of a cluster of items. E.g.,  $\chi^2$  values for [Habitat\*T1] may be compared with the value for [Habitat\*T2] or [Habitat\*T8].

The method described above is used for all the breaks calculated in this report. Fortunately, the statistical package SPSS makes manual calculations obsolete. If an association between a dependent and an independent variable proves to be significant, the values for  $\chi^2$  and the level of significance (expressed as a probability p, which means that the level of confidence equals 1-p) are listed in a summarizing table. The next step is the analysis of the contingency table which was at the basis for the calculation of the  $\chi^2$  test. This process implies that only significant associations are discussed.

### 3 Risk and trust

#### 3.1 Risk perception of 19 risks

The first thematic question in the survey deals with risk perception. All interviewees were asked: "How do you evaluate the risks for an ordinary citizen of Belgium, for each of the listed topics?"

The following graph presents a ranked listing of the 19 risk domains involved in the study. This particular ranking is based on the proportion of the sample expressing a high or a very high risk perception for each risk. In other words, the larger the bar which is orange and red coloured, the higher the ranking of the risk.

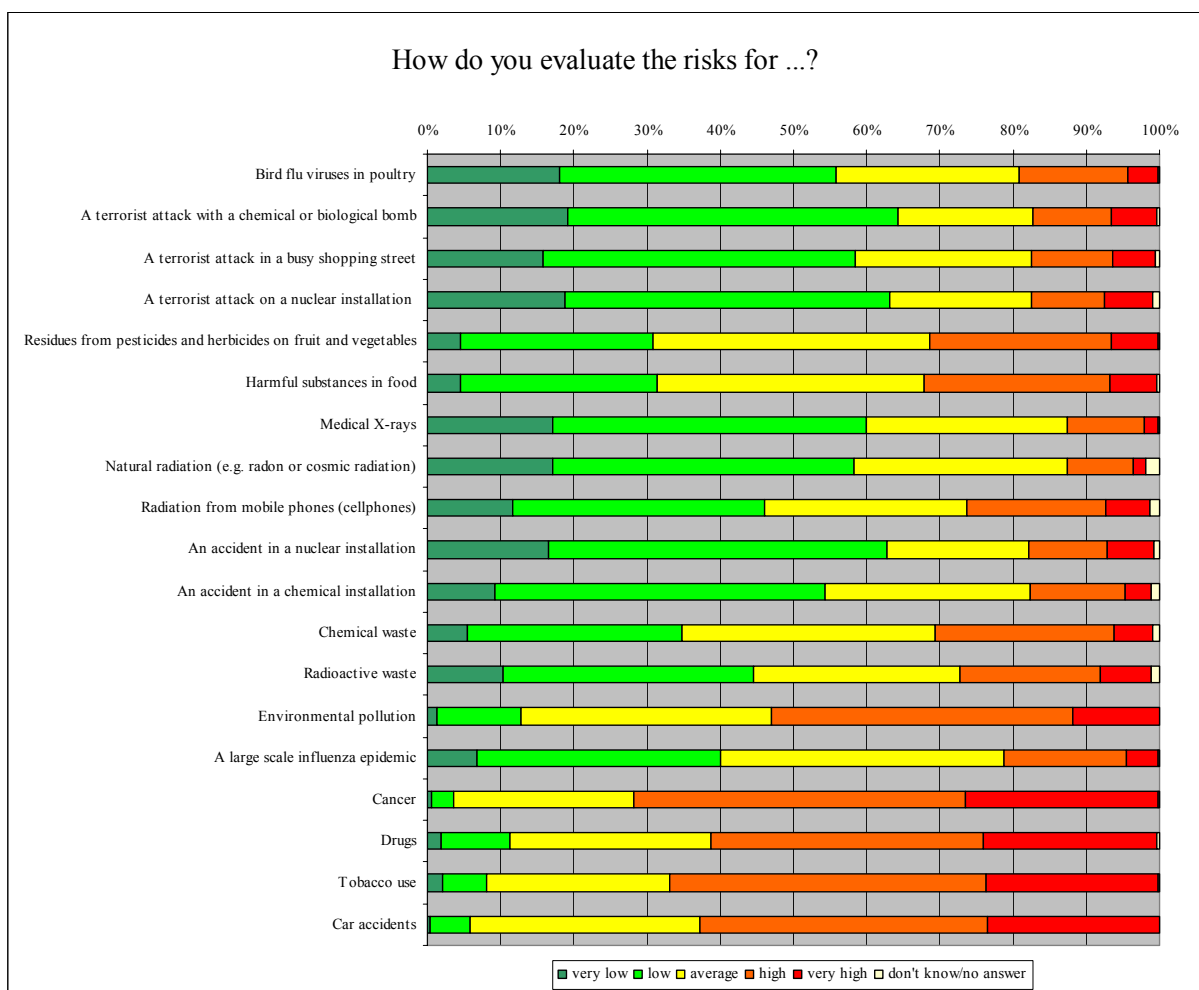


Fig. 2 Risk perception for 19 domains

Cancer, tobacco use, car accidents, drugs and, to a somewhat lesser extent, environmental pollution, are evaluated by the Belgian population as the top 5 risks. Right under these, two food related risks are positioned: harmful substances in food and residues from pesticides and herbicides. These are, in turn, followed by chemical and radioactive waste, radiation from mobile phones, a large scale influenza epidemic, bird flu viruses in poultry, an accident in a nuclear installation, three types of terrorist attacks (respectively in a nuclear installation, in a

busy shopping street and with a chemical or biological bomb) and finally, an accident in a chemical installation. People attribute the least risk to medical X-rays or natural radiation, like radon gases or cosmic radiation.

In the following analyses, the distribution of each risk is 'broken down' or 'crosstabulated' to the categories of the following independent variables: language, gender, education, region, habitat, social class, age, and finally, the dummy variable children (yes or no, referring to offspring not older than 18). If an association proves to be significant – according to the p-value for a  $\chi^2$ -test –, a comment is provided just after the table.

**Overview crosstabulation RA: Risk Perceptions**

	Language	Gender	Educa- tion	Region	Habitat	Class	Age	Chil- dren
<b>RA1 Car accidents</b>		$\chi^2=14,37$ p=0,006						
<b>RA3 Drugs</b>			$\chi^2=50,98$ p=0,010			$\chi^2=75,3$ p=0,000	$\chi^2=26,40$ p=0,003	
<b>RA4 Cancer</b>	$\chi^2=22$ p=0,001	$\chi^2=11,2$ p=0,048		$\chi^2=29,3$ p=0,001		$\chi^2=56,7$ p=0,011		
<b>RA5 Large scale Influenza</b>			$\chi^2=43,5$ p=0,053			$\chi^2=57,0$ p=0,011		
<b>RA6 Environmental pollution</b>					$\chi^2=37,17$ p=0,000			
<b>RA7 Radioactive waste</b>		$\chi^2=25,12$ p=0,000						
<b>RA8 Chemical waste</b>		$\chi^2=19,76$ p=0,001			$\chi^2=19,76$ p=0,001			
<b>RA9 An accident in a chemical installation</b>			$\chi^2=59,4$ p=0,001			$\chi^2=53,14$ p=0,025		
<b>RA10 An accident in a nuclear installation</b>		$\chi^2=25,05$ p=0,000	$\chi^2=46,10$ p=0,030			$\chi^2=60,99$ p=0,004		
<b>RA11 Radiation from mobile phones</b>		$\chi^2=24,27$ p=0,000			$\chi^2=34,91$ p=0,003			
<b>RA13 Medical X-rays</b>		$\chi^2=13,58$ p=0,000						
<b>RA14 Harmful substances in food</b>		$\chi^2=10,95$ p=0,052					$\chi^2=23,24$ p=0,010	
<b>RA16 Terr. attack on nuclear installation</b>			$\chi^2=49,22$ p=0,015			$\chi^2=63,38$ p=0,002	$\chi^2=30,35$ p=0,001	
<b>RA17 Terr. Attack shopping street</b>	$\chi^2=16,38$ p=0,006	$\chi^2=15,97$ p=0,007						
<b>RA18 Terr. attack with a chemical or biological bomb</b>			$\chi^2=53,38$ p=0,005			$\chi^2=62,85$ p=0,003		
<b>RA19 Bird flu viruses in poultry</b>	$\chi^2=29,10$ p=0,000	$\chi^2=23,57$ p=0,000	$\chi^2=46,61$ p=0,027	$\chi^2=33,48$ p=0,000				

RA1. Women have a slightly higher risk perception of car accidents than men have.

RA3. Drugs are thought of as more risky by persons with a lower education than by higher educated people.

Individuals from the lower classes judge drugs to be more risky than people from the higher classes.

Young people are less worried about drugs than the elderly.

RA4. Dutch speaking people are more often very worried about cancer than French speaking persons in Belgium.

Women are slightly higher concerned about the risks of cancer than men.

Concern about cancer is highest in Flanders and lowest in Wallonia. The Brussels region takes a position in-between.

People from lower classes express more often a high concern about the risks of cancer.

RA5. Belgians with a university degree are less often concerned or very worried about the outbreak of a large scale influenza epidemic than people with a mere primary education.

This effect is transposed to the social class: the higher social classes perceive a large scale influenza epidemic less often as a high risk than the social classes at the bottom of the scale do.

RA6. A very high risk perception of environmental pollution is gradually less encountered if one moves from the large cities over provincial cities and villages to the rural villages. In other words, people in cities are more often highly concerned about the environment.

RA7. Radioactive waste is perceived as more dangerous by a slightly larger proportion of the female population than the male population.

RA8. Chemical waste is perceived as more dangerous by a slightly larger proportion of the female population than the male population.

RA9. A low risk perception of an accident in a chemical installation is more often prevalent amongst people holding a higher education and especially a university degree than amongst persons with a less elaborated education. The same is true, vice versa, for a high risk perception. This effect is translated into the relation with social class: the higher social classes will less often express a high concern about accidents in chemical installations.

RA10. Men will often hold a very low risk perception of an accident in a nuclear installation; women are slightly more frequently highly concerned.

An outspoken difference is observed according to highest obtained diploma: more than 70% of people holding a university degree has a very low or low risk perception of an accident in a nuclear installation, while this accounts for only 42,6% of persons that have listed primary school as the highest education. Likewise, a very high or high risk perception of this issue is clearly more prevalent amongst people with a lower education than amongst people with a university degree.

The latter effect is also translated into the cross tabulation with social class. The lower social classes are more often concerned about an accident in a nuclear installation, while the higher classes care less often.

RA11. Women are slightly more often concerned about the risks from radiation emitted by mobile phones; less men are worried about the effects.

Moving from the large cities over provincial towns and provincial villages to the rural communities, concern for radiation from mobile phones is gradually less frequently expressed. 42% of the people in the countryside describe the risks as low, against a mere 27% of city dwellers. Likewise, a high risk perception is assessed amongst 16% of the inhabitants of rural villages against 25% of those living in the city.

RA13. Women are more easily worried about the risks of medical X-rays, while men seem to care less often.

RA14. Women express slightly more often a concern about harmful substances in food.

A stronger and significant effect (at  $\alpha=0,01$ ) is found when the distribution over age groups is examined: the proportion of people perceiving harmful substances in food as a high and very high risk grows with age. Amongst youngsters (18-34), this proportion is a mere 24,5%; it increases to 30,6 % in the category of 35 to 54 and amounts to 38,6% for the people older than 54.

RA16. Higher education means a lower risk perception of a terrorist attack on a nuclear installation. People with a mere primary education will perceive such an attack more easily as a high risk.

The lower social classes are more often worried about a terrorist attack on nuclear installations than the higher classes.

Fear of a terrorist attack on a nuclear installation is expressed more often as we move from the younger to the older generation.

RA17. With regard to a terrorist attack in a busy shopping street, a low risk perception is encountered more frequently in circles of Dutch speaking people than amongst French speaking people. Likewise, but less outspoken, we find that French speaking people will more easily judge this risk as high in comparison with the Dutch speaking counterpart.

A small difference in risk perception amongst women and men is noticed: women are slightly more often worried about this kind of terrorism.

RA18. A clear effect is noticed with regard to education: the higher the level of education, the more often the risk of a terrorist attack with a chemical or biological bomb will be perceived as very low.

Since the level of education is a constituting factor of social class, the effect of education becomes also visible in social class: a very low risk perception of this kind of terrorism is more common amongst the higher social classes than amongst the lower classes.

RA19. The French speaking population takes a more relaxed position regarding the risk of bird flu viruses in poultry than their Dutch speaking counterpart. French speakers express more often a very low and low concern, and less a high or very high concern than the Dutch speakers.

Men rate the risk of bird flu viruses in poultry more often as very low or low compared to women.

The higher the diploma obtained, the less people are concerned. 31% of persons holding a university degree rank the risk of bird flu viruses in poultry as very low, while less than 12% of people that have only a degree from primary school take up this relaxed stance.

In line with the language divide, people in Flanders hold a higher risk perception of bird flu in poultry than in Brussels or Wallonia.

### 3.1.1 A comparison of risk perception in 2002 and 2006

One notices (see Fig. 3) that in most cases, the general level of perceived risk is lower compared to the one measured in the first edition of the Belgian risk barometer. The drop is rather large when some particular risks are considered: the risk perception of (environmental) pollution, accidents in nuclear and chemical installations, nuclear and chemical waste, and, of course, terrorism.

Some of these shifts are easy to explain: the risk barometer 2002 took place in the aftermath of 9/11 when terrorism was perceived as maybe the biggest single threat to human existence. No easy explanations lend themselves to clarifying the other drops. These may be due to a different phrasing of the introductory sentence: "how do you evaluate the risk for an ordinary citizen of Belgium? <very low...very high>" (2006) versus "...the risks in general are <very low...very high>"(2002). They might also be due to a difference in describing the risk itself: "air pollution" versus "environmental pollution", or "radon in houses" versus "natural radiation, e.g. radon or cosmic radiation".

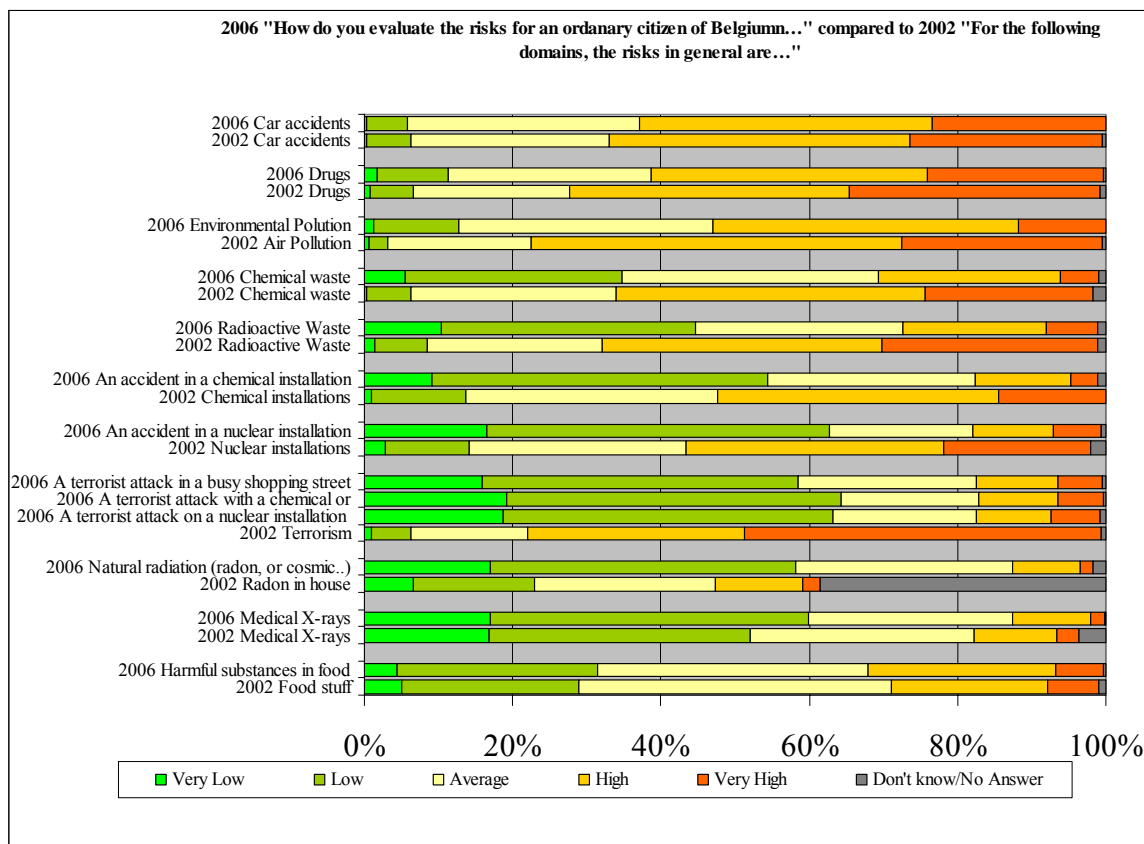


Fig. 3 Comparison of risk perception in 2002 and 2006

This dramatic decrease in perceived level of risk demands a careful, more detailed study. Caution is due if one attempts to draw definite conclusions. References to the body of literature on the subject and a comparative approach to similar, recent empirical research offer some valuable tools to gain more insight in this eye-catching results.

### 3.2 Confidence in authorities

The associated item was: "Please state how much confidence you have in the authorities for the actions they undertake to protect the population for each of the following items."

The table below given an overview of the proportional values for each answering category for the 19 particular risks. The ranking is based on the summed values for the categories <very little> and <little>. This means that the higher the position of a risk is in the table, the more worrisome the level of confidence is in the management of that risk in the eyes of the population. Large combined red and orange parts of the bar indicate thus a low level of confidence in the authorities for the actions they undertake to protect the population from that particular risk.

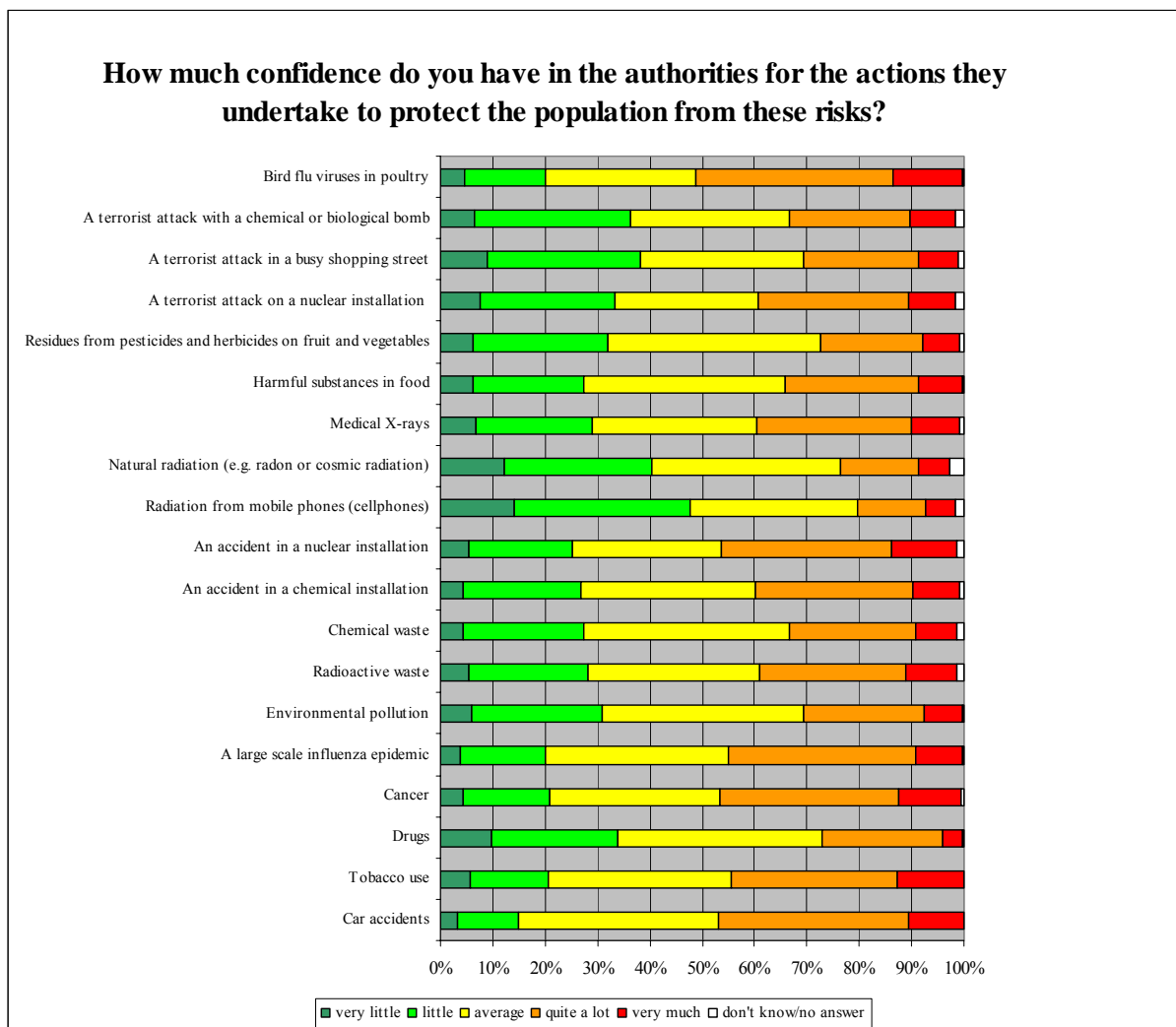


Fig. 4 Confidence in authorities for 19 risk domains



On average, the level of confidence citizens have in the authorities is not worrying. Radiation from mobile phones ranks as the number one concern regarding the risk management by the authorities, followed by natural radiation, a terrorist attack in a busy shopping street and a terrorist attack with a chemical or biological bomb. Distrust gradually diminishes if one descends the list, all the way down, ending with cancer, tobacco use, bird flu viruses in poultry, a large scale influenza epidemic and car accidents. Apparently, the domains where the authorities are held in high esteem when the management of risks is concerned are all areas which have received extensive media coverage with regard to the interventions of the state. The extensive governmental anti-smoking campaigns with a high visible impact may offer the best example to illustrate this hypothesis.

The following table provides an overview of the significant associations obtained through a crosstabulation of the 19 risks with the 8 independent variables.

**Overview crosstabulation RB: Confidence in the authorities**

	Language	Gender	Education	Region	Habitat	Class	Age	Children
<b>RB2 Tobacco use</b>					$\chi^2=38,75$ $p=0,001$			
<b>RB3 Drugs</b>								
<b>RB4 Cancer</b>	$\chi^2=26,29$ $p=0,000$		$\chi^2=47,15$ $p=0,024$	$\chi^2=31,97$ $p=0,000$	$\chi^2=33,76$ $p=0,004$			
<b>RB6 Environmental pollution</b>	$\chi^2=18,08$ $p=0,003$			$\chi^2=26,06$ $p=0,004$	$\chi^2=44,16$ $p=0,000$			
<b>RB7 Radioactive waste</b>					$\chi^2=42,93$ $p=0,000$			
<b>RB8 Chemical waste</b>					$\chi^2=51,12$ $p=0,000$			
<b>RB10 An accident in a nuclear installation</b>					$\chi^2=40,84$ $p=0,000$			
<b>RB11 Radiation from mobile phones</b>			$\chi^2=52,64$ $p=0,006$					
<b>RB12 Natural radiation (e.g. radon or rad.from space)</b>					$\chi^2=38,16$ $p=0,000$			
<b>RB13 Medical X-rays</b>					$\chi^2=47,61$ $p=0,000$			
<b>RB14 Harmful substances in food</b>					$\chi^2=50,92$ $p=0,000$			
<b>RB15 Residues from pest. and herb.</b>	$\chi^2=31,44$ $p=0,000$			$\chi^2=37,68$ $p=0,000$	$\chi^2=52,53$ $p=0,000$			
<b>RB16 Terr attack on nuclear installat.</b>				$\chi^2=29,89$ $p=0,000$				
<b>RB17</b>				$\chi^2=36,15$				

<b>Terr. Attack shopping street</b>				p=0,000				
<b>RB18 Terrorist attack w. chemical or biological bomb</b>				$\chi^2=25,58$ p=0,004				
<b>RB19 Bird flu in poultry</b>				$\chi^2=22,72$ p=0,012	$\chi^2=34,85$ p=0,003			

One recurring significant relationship concerning confidence in the actions undertaken by the authorities exists in the variable Habitat: the more rural an area, the larger the proportion that displays trust in the authorities for the management of a particular risk, in this case the use of tobacco. City dwellers, on the other hand, will be less inclined to put their trust in the authorities. Provincial cities and villages occupy a position between the two, but, somewhat strange, it is the provincial cities that lean towards the rural villages and likewise, it is the provincial villages that lean towards the large cities.

RB4. Dutch speaking people are more often confident in the actions which are undertaken by the authorities to protect the people from cancer than French speaking people do.

People with only primary school will express more frequently confidence in the authorities, than individuals with university degree. Likewise, distrust is greater amongst highly educated people than amongst people who have no higher diplomas.

Trust in the authorities concerning the actions against cancer is encountered most in Flanders, respectively followed by Brussels and Wallonia.

The more rural an area is, the higher the confidence expressed in the authorities regarding the management of the risks posed by cancer. This is true for large cities versus rural villages; for the provincial types of urbanization, this relationship is less clear.

RB6. A larger proportion of Dutch speaking than French speaking people expresses confidence in the actions the authorities undertake against environmental pollution. The same situation is, somewhat less outspoken, observed in the other sense: relatively more French speaking people than Dutch speakers distrust the authorities in the field of the handling of environmental pollution.

Seen proportionally, most people that distrust the authorities when environmental pollution is addressed live in Brussels, followed by Wallonia and Flanders.

Gradually more confidence in the authorities regarding the management of environmental pollution is encountered if one moves from the large cities to the rural villages. In other words, city dwellers distrust the authorities more frequently than inhabitants of rural areas. For the middle categories of urbanization, results are less clear; provincial cities lean towards the rural villages and provincial villages look a bit like large cities

RB7. High and very high confidence in the authorities regarding the actions they undertake to protect the population from the risks posed by radioactive waste is encountered more frequently in large cities than in rural villages. Not completely in line with this finding, is the fact that in provincial villages the proportion of the population expressing low confidence in the authorities is the highest in any of the four categories of urbanization. An elevated confidence in what regards nuclear waste is accordingly rarely encountered in these provincial villages.

RB8. Confidence in authorities regarding risk management of chemical waste by the authorities is a characteristic of rural villages, while city dwellers will display more often distrust. On the other hand, the situation in provincial villages reflects more or less the situation of large cities, just as the opinions in provincial cities are in line with those in rural villages. There exists thus no monotonous relationship between the degree of urbanization and the level of confidence. This relationship would exist in a monotonous, almost linear way if the categories provincial cities and provincial villages were switched in their ranking according to degree of urbanization.

RB10. In large cities and provincial villages, low confidence in the authorities regarding the protection by the authorities against an accident in a nuclear installation is more prevalent than in rural villages (respectively 30%, 30% and 15%). The category 'quite a lot of confidence' is accordingly best represented in rural villages. Counter intuitively – but as seen in the case of RB7 and RB9 – provincial cities reflect the position of rural villages (instead of leaning towards the position of large towns)

RB11. A higher education coincides with a lower confidence in the authorities in the field of the risk management of radiation from mobile phones.

RB12. In large cities, confidence in the authorities regarding the protection against natural radiation, for instance radon is more often low or very low than it is in rural villages. Provincial cities and provincial villages take a position in between the two. Somewhat counter intuitively, provincial cities bear a resemblance to rural villages while provincial villages reflect opinions held in large cities.

RB13. The same pattern returns, this time in the case of medical X-rays: the more urbanized an area, the higher the proportion of people expressing low or very low confidence in the authorities. Provincial cities lean towards the rural villages while provincial villages look a bit like large cities.

RB14. The well-known relationship returns regarding harmful substances in food. Lack of confidence in the authorities is encountered more frequently in large cities (35%), followed by provincial villages (30%), provincial cities (26%) and rural villages (18%).

RB15. Although the difference is small, relatively more French speakers than Dutch speaking people have but low confidence in the authorities for the actions they undertake to protect the population from the risks of residues from pesticides and herbicides.

This is reflected in regional differences: in Flanders, a slightly bigger portion of the population has great confidence in the authorities in this domain. The greatest lack of trust is noticed in Brussels, followed by Wallonia.

Cross tabulation of urbanization yields the familiar pattern: large cities host relatively more people with a low confidence in this regard than rural villages. As elsewhere, the positions of provincial villages and cities are reversed in this respect.

RB16. While not many meaningful differences can be revealed here, one stands out: Brussels is the region where confidence in the authorities regarding a terrorist attack on a nuclear installation excels. Likewise, the Brussels region hosts the lowest proportion of people attributing a low confidence to the authorities in this regard.

RB17. Again, not a lot of remarkable differences, except for Brussels, where the relative number of people expressing a very high confidence in the authorities (16%) - regarding the protection against a terrorist attack in a busy shopping street – is the greatest of all three regions in Belgium. This proportion does not exceed 9% in Flanders, while it is a mere 4% in Wallonia. The proportions for a high, intermediate or low confidence level are more or less the same for all three regions, so that the other differences are to be found in the very low level of confidence. Here, the values for Brussels, Flanders and Wallonia are respectively 5%, 7% and 15%.

RB18. As in the previous domains, meaningful differentiating variables are rare. Only cross tabulation with region yields some differences: the Brussels region stands out with a proportionally higher number of people having very much confidence in the authorities, this time when the risk management of a terrorist attack with a chemical or biological bomb is addressed.

RB19. Flanders has the lowest trust in the authorities regarding the bird flu viruses in poultry: only 48% of the population has quite a lot or very much confidence, against 53% in Wallonia and not less than 58% in the Brussels region. In rural villages, relatively more people have confidence in the authorities than in large cities, provincial villages and cities. Not a lot of difference is found between the latter three types of habitat; it is mainly the rural villages that stand out qua confidence.

### *3.2.1 A comparison of confidence in the authorities in 2002 and 2006*

Critical levels of confidence in the authorities for the actions they undertake to protect the population from a number of risks (red and orange parts), are down in 2006 compared to 2002. The only exceptions are natural radiation/radon, medical x-rays and harmful substances in food.

Just as it was the case with the previous comparison graph, no easy explanation of these figures is at hand. This time, the phrasing of the question was the same in 2006 as in 2002. The wording of the risk domain, however, differed for some areas (see supra). Just as before, caution must be exerted to interpret these data.

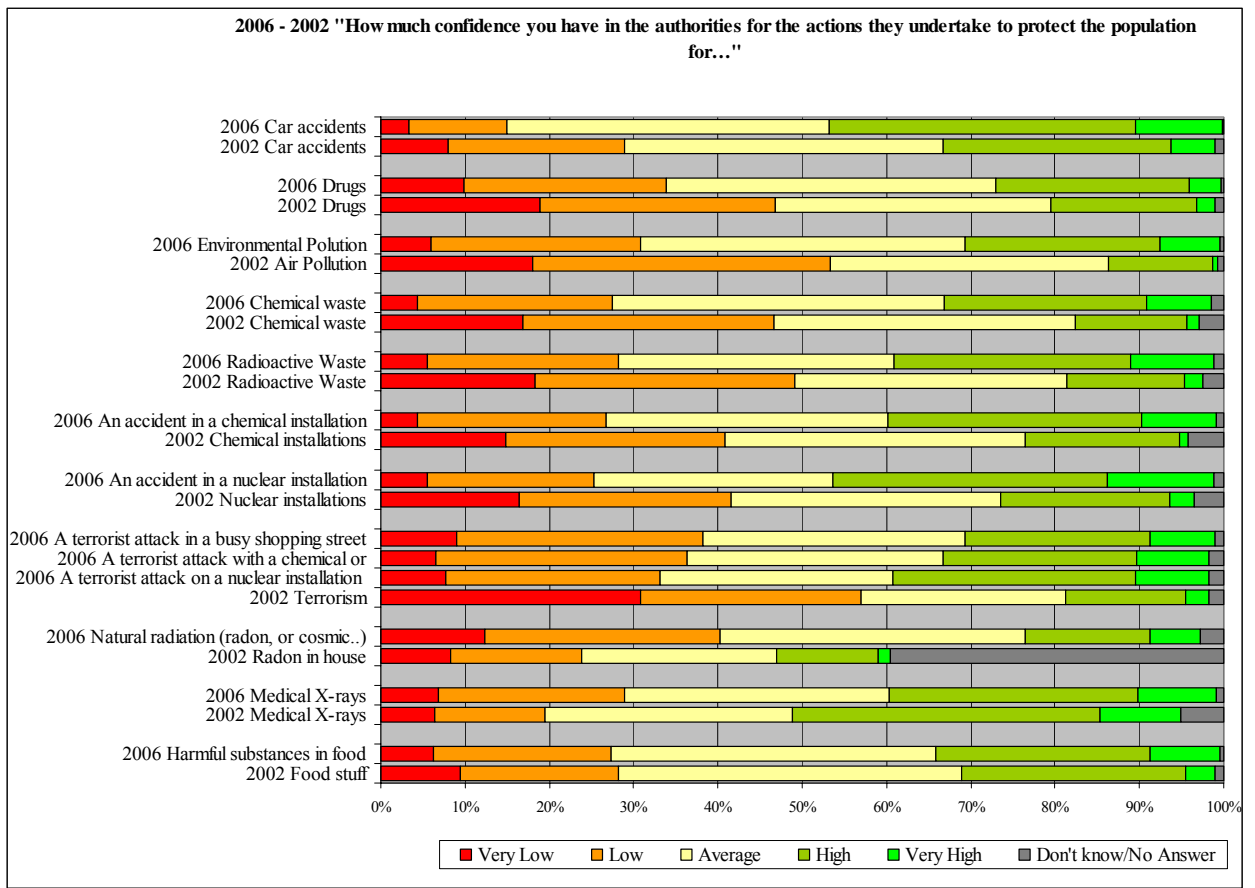


Fig. 5 Comparison of confidence in authorities in 2002 and 2006

## 4 Food safety

### 4.1 Consumer types

Before engaging in the actual research on opinions about food safety, an assessment was made of the occurrence of the use of home-grown products by the respondents.

[B 01] *"I use, as much as possible, home-grown products (own garden, via friends or acquaintances...)"*

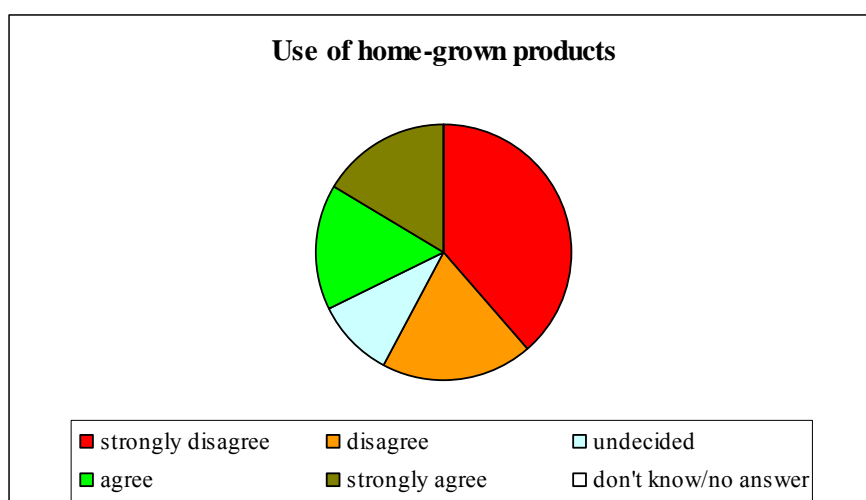


Fig. 6 Use of home-grown products

It turns out that the majority of the Belgian population does not make use of foodstuffs produced in one's own, family's or acquaintances' garden. In the light of the high population density and the advanced level of urbanization of Belgium, it is as such remarkable that more than a quarter of the people uses as much as possible home-grown products.

Dutch speakers, inhabitants of rural and provincial villages, inhabitants of Flanders and older people are proponents of using home-grown products. Their use is much more limited among the French speaking, city dwellers, in Brussels and Wallonia and the younger generations.

[B2-B7] *"Could you rate the importance of the following elements when buying food?"*

The analysis of food safety perception is furthermore preceded by a number of questions regarding the criteria which are employed when buying food. Six of such elements were retained in the final questionnaire: price, freshness, quality, origin, organic cultivation and ambiance of the store. Respondents were asked to rate the importance of these elements when buying food products on a scale from "unimportant" to "very important".

The results confirm without any doubt the image of Belgium as a food-loving country: freshness and quality are considered by respectively 98% and 96,6% of the population as important or very important. On the other hand, these may not come at just any price: three quarters of the population attach importance to the price when buying food. One out of two

Belgians consider the ambiance of the store as important. This proportion is higher than the two remaining criteria: just one third of the population thinks origin is important, while 28% cares about organic cultivation.

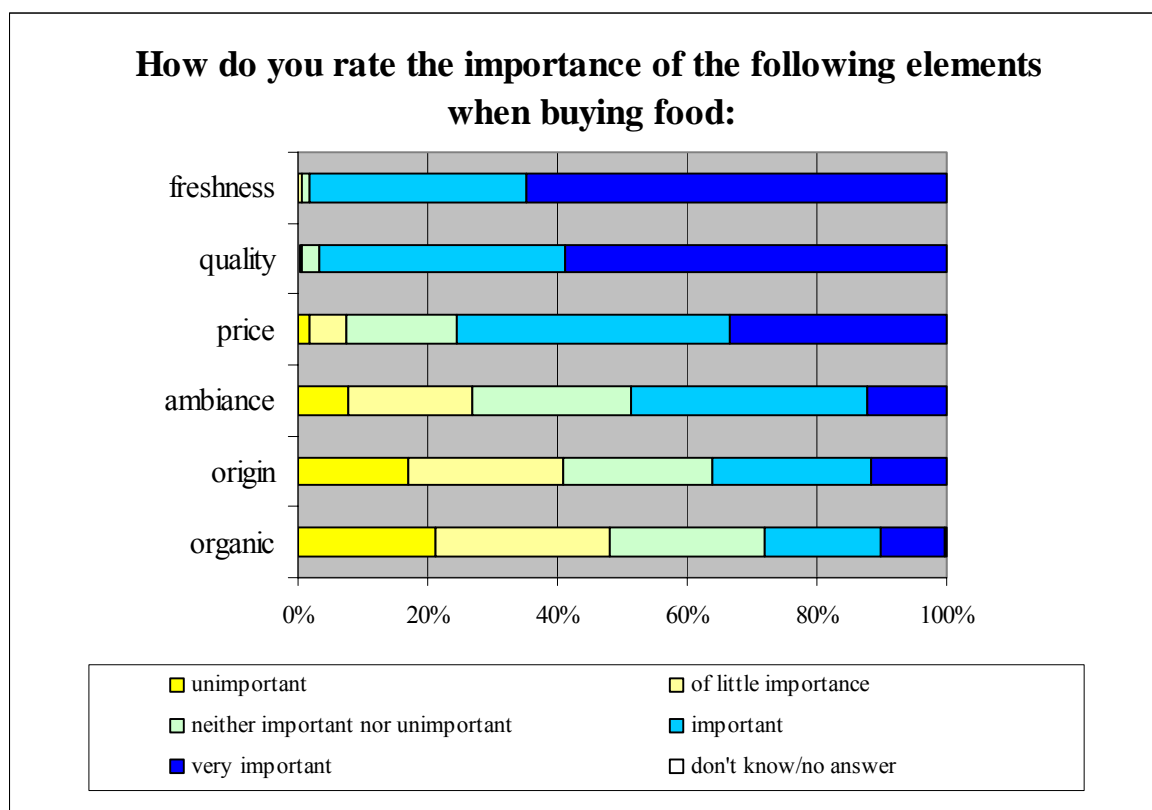


Fig. 7 Consumer factors

## 4.2 Acceptance of legal norms

After the introductory questions with regard to food, a first aspect of food safety is discussed, namely the legal norms which define the amount of toxic substances that food products may contain. Since the concept of a legal norm with regard to food safety is probably not known to everyone, the interviewer briefly explained the meaning of these norms as follows: *the government plays an active role by limiting the quantity of toxic substances a particular foodstuff may contain. These upper limits are laid down by the government as legal norms. Such a norm may thus tell us how much dioxin chicken meat may contain, or how much preservatives may be present in cookies.*

The complex nature of the acceptance of a legal norm requires a refinement to an operational form before it can be used in a public survey. It is virtually impossible to ask people directly about their acceptance of the legal norms with regard to food. The multifaceted concept of the acceptance of a legal norm thus needs to be broken down into one or more simple items which in turn can be translated in accessible questions.

In socio-legal theory, norm acceptance is traditionally connected to a triangle of recurring factors: content, enforcement and legitimacy (see for instance, Griffiths, 1996; Rottleuthner, 1987; Ross, 1989).

- The **content** of the norm: do people agree with what's in it? Do they think the norm is just, right, logical? Is it conforming their expectations, their informal social rules?
- The **enforcement**: a norm will be accepted if enforcement is in place and the possible sanctions are swift, certain and sufficiently severe;
- The **legitimacy** of the rule giver and the sources of the norm: is the source or rule giver held in high esteem (or feared)? Do they radiate trust or authority? Is the rule a product of sound reasoning or just a mere side-effect of political power games? Is the rule a result of a democratic process?

For every theoretical subdimension, three questions (items) were elaborated. These items were constructed such as to capture the most important aspects of the relevant subdimension. To induce greater reliability, half of the items are stated in a negative way. When taken together, the presence of both positive and negative statements balances possible biases caused by the positive or negative setting of the phrasing. In the methodological literature is often referred to acquiescence, or agreeing-response bias, a presumed tendency for respondents to agree with attitude statements presented to them (Shuman and Presser, 1996). By introducing negative statements, we hope to counter the acquiescence effect.

#### **Content of the legal norm**

- The legal norms offer sufficient protection for all citizens, including children and the elderly.
- A food product that complies with the legal norm can be safely consumed.
- The legal norms are not strict enough.

#### **Enforcement of the legal norm**

- The government is inadequately organized to secure food safety.
- There is sufficient control of food products.
- The food industry violating the legal norms is not punished severely enough.

#### **Legitimacy of the sources of legal norms**

- Legal norms are the result of sound reasoning by the government.
- Political and economic power games decide how strict the norms are.
- Legal norms are not enough based on what experts know.

Summated, the nine items should constitute a constructed variable or a multi-item scale that should measure norm acceptance, since the various items all constitute a tiny part of the multifaceted construct norm acceptance. Of course, this construct is based on theory. It is now possible to test whether this theoretical construction holds against the findings of the survey. Two important questions are to be raised at this point. A first concern is reliability: how reliable is the scale as an instrument? A second issue is (construct) validity: does this scale measures the conceived variable as intended?



Reliability and validity are often misunderstood or interchanged. A classic illustration is a thermometer. If a thermometer measures the same temperature on day A and day B -which are equally warm-, the thermometer is reliable. If, on the other hand, the thermometer measures the temperature – and not pressure, for instance – it can be called righteously so a temperature measuring tool, a thermometer – and not a barometer, for instance.

A number of formal tests exist to test the reliability and validity of summated scale variables. We opt for the well-known calculation of Cronbach's Alpha and for a factor analysis to determine respectively reliability and validity.

To assess the reliability of this scale, the formal test of choice is conducted by calculating Cronbach's  $\alpha$ . This measure is based on the inter-item correlations as follows:

$$\alpha = \frac{N \cdot \bar{r}}{1 + (N - 1) \cdot \bar{r}}$$

with N being the number of items and  $\bar{r}$  the average inter-item correlation.

The computed value of  $\alpha$  should exceed 0,70 in order to judge the scale as reliable.

For the nine items above,  $\alpha$  equals 0,813. The scale thus passes the test easily, making it one of the better scales in social-scientific research. Since correlations are at the core of the test, we also present the correlation matrix.

#### *Correlations for the 9 norm acceptance-items*

Correlations									
	NO1	NO2	NO5	NO7	NO3i	NO4i	NO6i	NO8i	NO9i
NO1	1,00	0,60	0,56	0,53	0,42	0,43	0,14	0,27	0,32
NO2		1,00	0,52	0,46	0,36	0,33	0,06	0,20	0,23
NO5			1,00	0,43	0,42	0,46	0,16	0,21	0,29
NO7				1,00	0,35	0,37	0,10	0,21	0,28
NO3i					1,00	0,50	0,27	0,26	0,44
NO4i						1,00	0,24	0,33	0,44
NO6i							1,00	<b>0,06</b>	0,22
NO8i								1,00	0,27
NO9i									1,00

(\*) All correlations significant at  $\alpha=0,05$ , except values in bold. Negatively stated items are inversed (i) to avoid negative correlations.

A quick glance teaches us that items NO6 and NO8 correlate rather weakly with the other items. On the other hand, very strong correlations exist when variable NO2, NO5 and NO7 are involved. The latter variables contribute largely to the high  $\alpha$ -value. The former variables drag the average inter-item correlation down, resulting in a lowering of the  $\alpha$ -value. A common way of dealing with these negative contributions is to reconstruct the summated scale variable by flinging the weakest correlating items out of the scale. Items NO6 and NO8 clearly display the weakest associations with the other constituting items. A simple solution presents itself thus by building the construct on all items except NO6 and NO8.

Recomputing  $\alpha$  on the basis of the 7 remaining items yields a value of 0,84, which is an improvement over the initial value. The final summated scale variable - norm acceptance - consists of the sum of the scores for the individual 7 items that are retained. Since two negatively stated items are deleted from the definition of norm acceptance, three negative and four positive statements remain. As seen in the correlation matrix, the negatively stated items have been inverted, so as to enable the calculation of Cronbach's  $\alpha$ . Furthermore, inverting is necessary for the computation (otherwise a simple sum) of the final variable.

Removing two items has, on the other hand, an important implication. The subdimension legitimacy cannot be represented anymore by 3 items, since only one of the original items has survived the correlation-test. However, this should not be of any concern. In the initial three-items constitution per subdimension, the value for Cronbach's  $\alpha$  for the subdimension content was 0,71; for enforcement, it was 0,54 and for legitimacy 0,51. The values for the two latter concepts are well beyond the threshold-value of 0,70. This implies that enforcement and legitimacy are not reliably expressed through the constituting items. As such, it makes little sense of treating the subdimensions as particular variables.

This finding is replicated through the second formal test that is applied to norm acceptance, a factor analysis based on principal components<sup>5</sup> with the aim of identifying the number of dimensions which can be distinguished in the nine (or seven remaining) items. For a concept to be expressed unambiguously through a number of items, factor analysis should reveal only one underlying dimension. If this is the case, the summated scale variable is a valid representation of one and only one concept.

The test of validity of the scale conducted shows that only one component can be isolated, following the rule of thumb that a component is retained when the initial eigenvalue equals or is greater than 1.

### ***Factor analysis of Norm Acceptance***

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,60	51,41	51,41	3,60	51,41	51,41
2	0,99	14,17	65,58			
3	0,60	8,56	74,14			
4	0,53	7,64	81,77			
5	0,50	7,11	88,89			
6	0,42	5,95	94,84			
7	0,36	5,16	100,00			

<sup>5</sup> PCA is a [linear transformation](#) of the data to a new coordinate system such that the greatest variance by any projection of the data lies on the first coordinate (called the first principal component), the second greatest variance on the second coordinate, and so on. PCA can be used for [dimensionality reduction](#) in a dataset while retaining those characteristics of the dataset that contribute most to its [variance](#), by keeping lower-order principal components and ignoring higher-order ones. Such low-order components often contain the "most important" aspects of the data, see e.g. [http://en.wikipedia.org/wiki/Principal\\_component\\_analysis](http://en.wikipedia.org/wiki/Principal_component_analysis).

The components matrix yields the following factor loadings:

Component Matrix	
	Component
	1
NOitem1	0,81
NOitem2	0,73
NOitem3i	0,71
NOitem4i	0,71
NOitem5	0,76
NOitem7	0,69
NOitem9i	0,58

Furthermore, all items load very well on the one component; the threshold rule of thumb-value for the factor loadings of 0,60 is just not obtained by the ninth item. Since the difference is marginal, no further actions are undertaken. We can conclude that the seven items belong to a single, unidimensional scale.

This confirms not only the construct validity of the concept 'norm acceptance' as built on the seven items, but it also points to the lack of empirical proof for the existence of the three subdimensions<sup>6</sup>.

For the sake of the descriptive analysis, the distributions over the categories for the 9 original items are displayed. This is followed by a graphical representation of the distributions of the summated scale variable norm acceptance. In order to enhance the readability of the graph, the negatively formulated items have been inverted, which facilitates comparisons across the different items.

#### *Norm Acceptance: 9 initial items*

- NO1 The legal norms offer sufficient protection for all citizens, including children and the elderly.
- NO2 Food products complying with the legal norms can be safely consumed.
- NO3 The legal norms are not strict enough.
- NO4 The authorities are inadequately organized to secure food safety.
- NO5 There is sufficient control of food products.
- NO6 The food industries violating the legal norms are not punished severely enough.
- NO7 Legal norms are the result of sound reasoning by the government.
- NO8 Political and economic power games decide how strict the norms are.
- NO9 Legal norms are not enough based on what experts know.

<sup>6</sup> A second component has an eigenvalue of 0,99, which could indicate that the seven items do not measure a unidimensional concept, but fall effectively apart in two groups (components). After analysis, it turns out that the first component consists of the positively stated items, while the second is made up by the negative items. This is a well-known phenomenon in survey research (see e.g. the technical paper of C.V.King, [http://www.populus.com/techpapers/download/fa&\\_neg\\_worded.pdf](http://www.populus.com/techpapers/download/fa&_neg_worded.pdf)), and reflects nothing more than the natural cohesion among responses to positive statements on the one hand, and to negative statements on the other. Indeed, the negatively stated items yield, without exception, the largest proportions of disagreement, while the positively stated items will provoke a more positive response. As seen before, these can be understood as acquiescence effects.

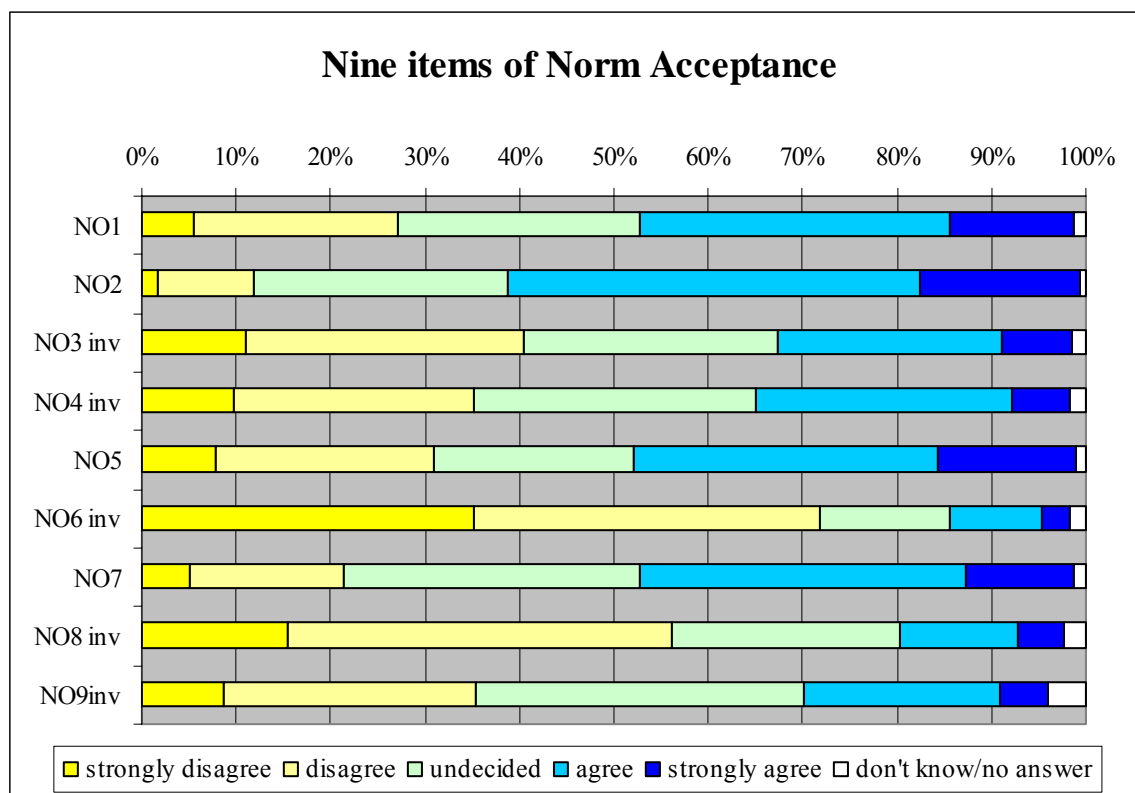


Fig. 8 Norm acceptance items

There are more people agreeing than disagreeing with the first two statements, NO1 and NO2. In other words, there are more people who regard the rules themselves as offering protection and as strict enough than people who do not, when the question is worded in a positive way. An exception is NO3, which appeared in the questionnaire as "The legal norms are not strict enough". In inverted form, only about 30% believes that the legal norms are strict enough. This is in line with a phenomenon that is repeatedly observed throughout this study, namely that the population seeks the highest level of protection possible.

The French speaking are proportionally less inclined to agree with these first three items than the Dutch speaking. In line with this finding, agreement becomes rarer if one moves from Flanders over Brussels to Wallonia. Geographically speaking, rural areas see a higher level of support for the protection and safety provided by the norms and their strictness, than urbanized area does.

Social class and diploma have a negative association with NO1-NO3, meaning that a higher social class or a lower diploma coincide with a lower level of agreement. No other significant breaks were found with the socio-demographic independents.

Considering the items originally conceived to capture the enforcement of the norms (NO4-NO6), we find that the proportion of Belgians believing that the government is adequately organised to secure food safety is about as large as the part that thinks the opposite (NO4). About 40% of the population thinks control of food products is sufficient, compared to a bit more than 30% that is convinced this is not the case (NO5). A larger divide rises when sanctions are questioned: about 70% thinks that the food industry is not being punished

severely enough when they violate the legal norms, against a meagre 20% that thinks it is so (NO6).

Again, language, region and level of urbanization interact with this subset of items (NO4-NO6), in the same way as they did before (see NO1-NO3). However, the effects of diploma and social class are not significant, just like gender, age and having kids.

Just 4 out of 10 Belgians believe that norms are the result of sound reasoning by the government (NO7). More than 50% agree with the statement that these questions economic and political power games. Of those having an opinion on the role of the expert in the rulemaking process, most say this role is limited. It should be noted that especially the last question provokes a relative high percentage of 'no answers' or 'don't knows' in addition to a substantial 'undecided'-category of – the actual role of the expert in the political decision making process is not very well known by the Belgian population.

Language and region prove to be, again, important discriminants for the last three of the initial nine items. The view of the French speaking on the last three items (initially referring to legitimacy) is much more negative than the opinion of the Dutch speaking population. This is visible as well in the regional differences: the highest scores for the items theoretically linked to legitimacy are found in Flanders, leaving Brussels and Wallonia far behind.

A higher diploma is significantly associated with a lower assessment of the presumed legitimacy of the rules. This effect is not transposed to social class, probably since the impact of occupation (the other composing half of the variable social class) is not significant.

#### Norm acceptance as a summated scale variable

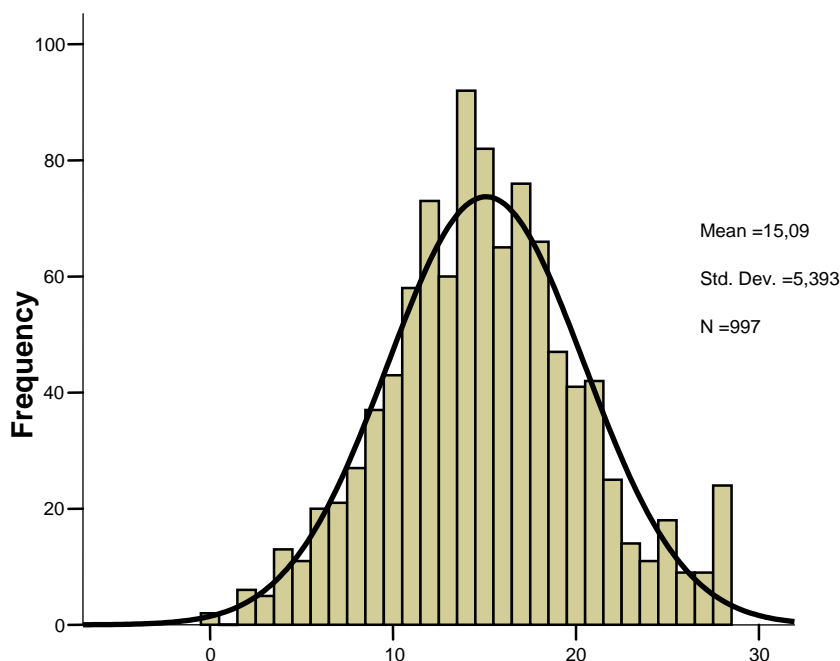


Fig. 9 Norm acceptance as a summated scale variable constructed with 7 items, with transformation (- 7) to obtain a minimum of zero

As seen before, the individual items and their associations with a set of independent variables, are no target variables in themselves; they were selected to constitute, taken together, a summated scale variable. The graphical representation of the distribution of this target variable is shown hereunder.

Its distribution is more or less normal. Most respondents express an average norm acceptance. Gender, age (in 3 categories) and having kids (yes/no) show no significant associations with norm acceptance. Region and language show a divide similar to the one observed within the first three items of the scale. Diploma has a slight association with norm acceptance, implying that lower diplomas tend to be associated with a higher level of norm acceptance. Urbanized areas score worse than rural areas regarding norm acceptance.

### **4.3 Opinion on management options in case of an accidental contamination**

In case of a radioactive contamination of the food chain, several management options for food production systems can be employed, either targeted on specific radionuclides (e.g. AFCF as feed additive largely reduces the radiocaesium transfer to milk and meat), or being effective against all radionuclides (e.g. food ban). Maximum permitted radioactivity levels for food products, also called the European Council Food Intervention Levels - CFIL – (CEC, 1989), have been laid down at the level of the European Union and are adopted by the Belgian legislation, as well. But in general, as proven in Belgium by past crises in the food chain, public perception about the risks may lead to more conservative measures than scientifically judged as necessary.

The questions in the following two sections try to capture on the one hand the acceptability of such management options in case of a crisis, and on the other hand the consumers' behaviour. In order to limit the scope and allow a better comprehension of the management options involved, the focus is laid on milk and dairy products. This is justified, e.g. by the importance of milk in the food chain and the rapid transfer of some radionuclides to milk (Nisbet, 2002). Some main findings can nevertheless be extrapolated to other types of foodstuffs.

First, a description of a hypothetical situation is introduced to the interviewee through a video clip simulating a news broadcast, as presented below.

#### **Clip 1**

The accident that has caused yesterday a release of radioactive material is now under control. According to the authorities, there is no further threat for the population. Measurements seem to indicate however, that a deposition of radioactive substances on soil and pastures has taken place on a radius of about 50 km from the affected installation. This deposit poses no direct threat to the health of humans and animals. But if the cows remain grazing on the pastures, a part of these radioactive substances will be transferred to milk and meat. It is expected that the values will exceed the legal norms in a number of farms. These norms, which have been laid down at European level, are also in effect in Belgium. The authorities are increasing the number of controls, in order to ensure that the norms will be respected. Taking into account the number of farms and dairies located in the affected area, the authorities are now deliberating, together with agricultural organisations, experts and the food industry in order to find out what is feasible do in order to prevent or limit the contamination of milk and other dairy products.

In order to assess public acceptability of the different management options for contaminated milk, a differentiation is made between two hypothetical situations: the first in which the legal norms for raw milk would be exceeded, in case no actions is undertaken; the second in which even in the case of no action, the raw milk is expected to remain below the legal norms.

#### 4.3.1 *Expected contamination of raw milk exceeds legal limits, if no action is undertaken*

- CM1. The farmers keep the cows in the stables and feed them clean feed so that the contamination stays under the legal norms.
- CM2. The cows are given feed additives so that the contamination of the milk is reduced below the legal norms.
- CM3. The milk is processed to butter and cheese which do comply with the legal norms.
- CM4. The dairies mix contaminated milk with clean milk to reduce contamination below the legal norms.
- CM5. If this contamination would last a long time, the cows should be slaughtered and destroyed.
- CM6. All the raw milk contaminated above the legal norm is destroyed without trying to process it into products complying with the legal norms.
- CM7. If health specialists say it is not dangerous for our health, products above the legal norms can be consumed as usual.

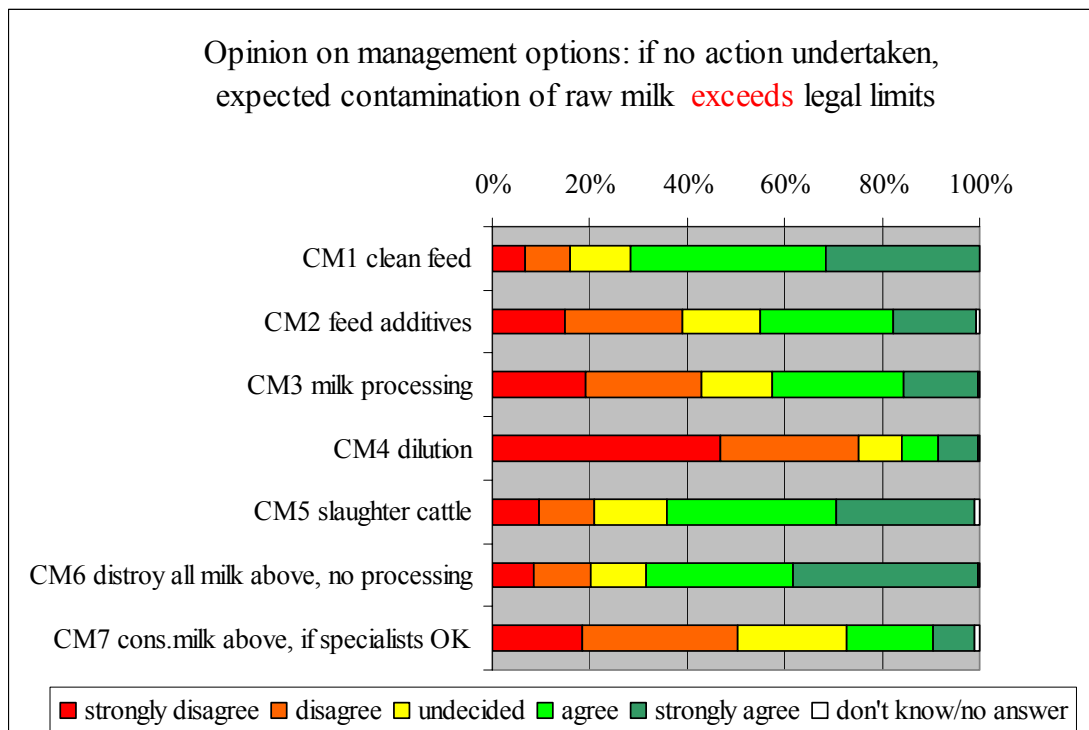


Fig. 10 Acceptance of milk management options when contamination exceeds legal norms

In addition to the first six management options, the last question (CM 7) investigated the hypothesis of a contamination above the legal norms, but which would not pose serious health problems. More than 50% of the people interviewed find the normal consumption of such products unacceptable, as opposed to only 26% who find it acceptable. The two management options with highest acceptance are clean feeding (71% in favour) and food ban with destruction of all contaminated milk (68% in favour). Quite highly accepted is also the slaughter of dairy cows, for the case of a long lasting contamination (63% in favour). An overwhelming majority (75%) thinks that dilution of contaminated milk with clean milk is unacceptable.

Cross tabulation of the management options with the familiar set of independent variables, yields some interesting results.

#### *Cross tabulation of CM1-CM7*

	Language	Gender	Education	Region	Habitat	Class	Age	Children
<b>CM1</b>	$\chi^2=21,90$ p=0,001			$\chi^2=30,13$ p=0,001	$\chi^2=54,97$ p=0,000			
<b>CM2</b>	$\chi^2=29,66$ p=0,000		$\chi^2=58,69$ p=0,001	$\chi^2=33,44$ p=0,000	$\chi^2=32,15$ p=0,006	$\chi^2=78,91$ p=0,000		
<b>CM3</b>	$\chi^2=20,56$ p=0,001		$\chi^2=66,25$ p=0,000	$\chi^2=31,12$ p=0,001	$\chi^2=39,55$ p=0,001	$\chi^2=70,52$ p=0,000		
<b>CM4</b>	$\chi^2=129,77$ p=0,000		$\chi^2=62,76$ p=0,000	$\chi^2=130,28$ p=0,000	$\chi^2=51,77$ p=0,000	$\chi^2=67,25$ p=0,001		
<b>CM5</b>	$\chi^2=25,49$ p=0,000	$\chi^2=11,40$ p=0,044		$\chi^2=26,25$ p=0,003	$\chi^2=26,16$ p=0,036			
<b>CM6</b>	$\chi^2=109,02$ p=0,000			$\chi^2=108,08$ p=0,000	$\chi^2=34,55$ p=0,003	$\chi^2=67,26$ p=0,001		$\chi^2=13,14$ p=0,022
<b>CM7</b>	$\chi^2=48,11$ p=0,000			$\chi^2=53,54$ p=0,000	$\chi^2=36,58$ p=0,001	$\chi^2=58,80$ p=0,007		

Regarding CM1 (clean feed), support is most outspoken in Flanders (76%), followed by Wallonia (60%) and Brussels (60%). This translates into the language effect: the Flemish agree more than the French speaking do. Finally, rural areas are much more in favour than large cities are. The other variables (gender, region...) did not show any significant associations.

CM 2 (feed additives) sees a divide on five variables. Again, the rural areas have a higher proportion of agreement than the large cities. The French speaking and Wallonia are proportionally more in favour than the Dutch speaking and Flanders. People who went to university take a more critical position than people who have enjoyed but a primary education. This divide is translated to social class: higher social classes are less often supportive of this particular management options than lower classes are.

The processing of milk (CM3) is, in contrast with the previous management option, thought of more positive by the Dutch speaking and Flemish than the French and Walloon part of the population. A lower diploma and lower classes are associated with more support for this countermeasure.

Dilution, the fourth scenario (CM4), is objected much stronger by the French speaking (and Wallonia) than the Flemish speaking (and Flanders). People holding a university degree



and/or belonging to the highest social classes disagree more easily with this option than people with a lower diploma and/or from the lower social classes.

The fifth option (CM5) is popular across the population as a whole. Nevertheless, we note that the French speaking and the region Wallonia will generally *strongly* agree with this option, while the Dutch speaking and the Flemish region merely agree.

The sixth option (CM6), which is again a very popular one, has a particularly strong following in Brussels, Wallonia and large cities – people there tend to agree *strongly*. In Flanders and more rural areas, relatively more people just agree. Last, the lower the social class, the higher the level of strong disagreement with this statement; approval for this option is found mainly among the higher educated.

The last statement regarding specialists (CM7) has significant associations with language, region and habitat: Dutch speakers, Flanders and rural areas, display somewhat less disagreement with the statement about specialists than the French speaking, Wallonia and the urbanized areas.

#### 4.3.2 *Expected contamination of raw milk doesn't exceed legal limits, even when no action is undertaken*

- CM8. Products below the legal norms can be consumed as usually.
- CM9. The contamination must be decreased as much as possible, even if it is already under the legal norm.
- CM10. The farmers keep the cows in the stables and give them clean feed so that the milk produced is clean
- CM11. The cows are given feed additives so that the contamination of milk is further reduced.
- CM12. If butter and cheese are less contaminated than raw milk, it is better to process this milk.
- CM13. The dairy farms mix the contaminated milk with clean milk so that the contamination is further reduced.
- CM14. Even if the milk is below the legal norms, it should be destroyed.

As in the previous situation, clean feeding of animals is the preferred option (71% in favour), whereas the acceptability of destroying all contaminated milk decreases compared to previous (only 39% find it acceptable), see Fig. 11.

The administration of feed additives and the processing of milk lie in both situations between the most preferred and the least preferred option, with a slight preference bias in favour of feed additives. The mixing of clean and contaminated milk (dilution) is widely disagreed with, just as in the previous situation analysed.

We note that CM9 (reduce contamination as much as possible, even below legal norms) doesn't make reference to a particular management option. We decided to introduce it because management options are not only intended to mitigate the health effects of radiological contamination, but also to bring social reassurance. Actually more than 80% of the persons interviewed were in favour of such a policy.

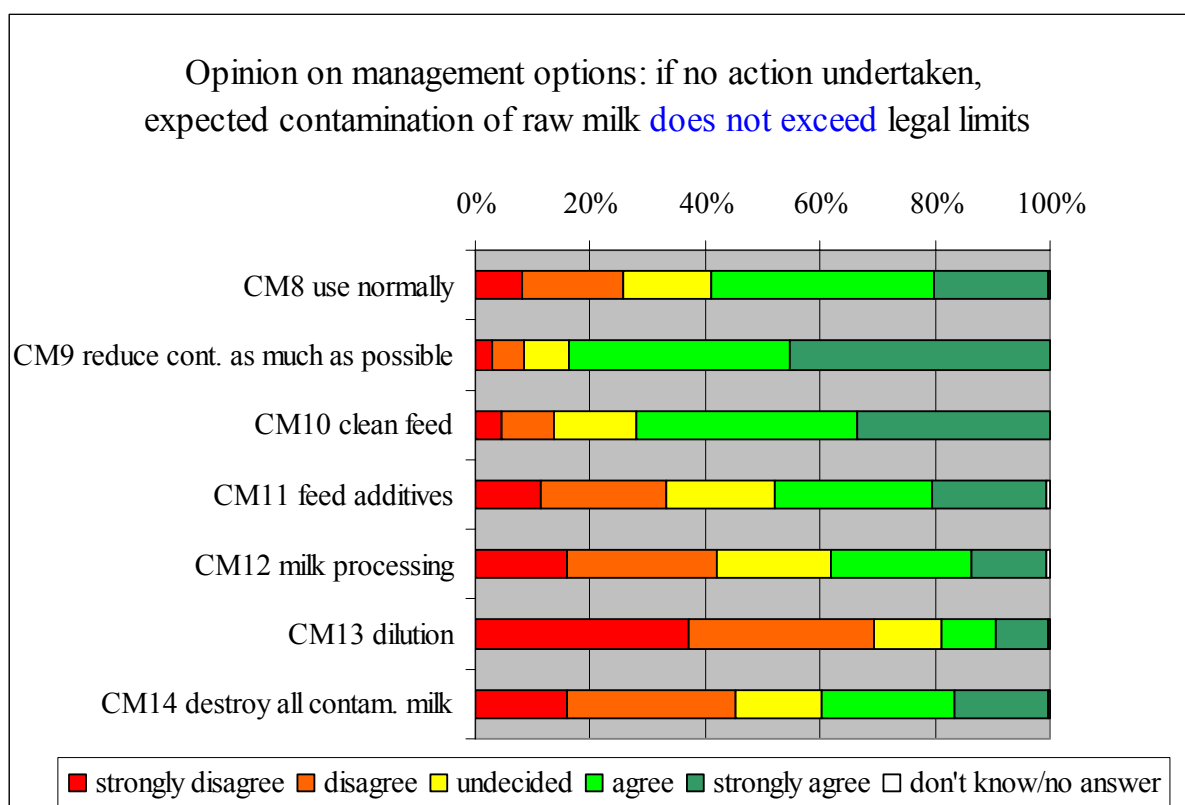


Fig. 11 Acceptance of milk management options if contamination remains below legal norms

The distributions of opinions regarding this particular set of management options across gender, region, language, habitat, age, highest level of education, social class and finally, having kids or not, show the same tendencies as in the previous context where the legal limits were not exceeded. Especially the language divide, coupled to the regional divide, is quite strong here. Associations with the level of urbanization reappear often; level of education and social class appear to be less important here in predicting the attitude on the management options. Gender, age and kids are completely absent in this respect. Here follows an overview:

#### ***Cross tabulation CM8-CM14***

	Language	Gender	Education	Region	Habitat	Class	Age	Children
<b>CM8</b>	$\chi^2=70,10$ $p=0,000$		$\chi^2=43,84$ $p=0,049$	$\chi^2=78,48$ $p=0,000$	$\chi^2=49,21$ $p=0,000$			
<b>CM9</b>	$\chi^2=86,49$ $p=0,000$			$\chi^2=94,70$ $p=0,000$	$\chi^2=33,40$ $p=0,001$			
<b>CM10</b>	$\chi^2=51,27$ $p=0,000$			$\chi^2=56,04$ $p=0,000$	$\chi^2=50,65$ $p=0,000$			
<b>CM11</b>	$\chi^2=35,08$ $p=0,000$		$\chi^2=50,69$ $p=0,010$	$\chi^2=38,72$ $p=0,000$	$\chi^2=32,03$ $p=0,006$	$\chi^2=78,55$ $p=0,000$		
<b>CM12</b>	$\chi^2=36,54$ $p=0,000$			$\chi^2=43,45$ $p=0,000$	$\chi^2=55,13$ $p=0,000$	$\chi^2=78,00$ $p=0,000$		
<b>CM13</b>	$\chi^2=116,73$ $p=0,000$		$\chi^2=58,66$ $p=0,001$	$\chi^2=114,69$ $p=0,000$	$\chi^2=50,61$ $p=0,000$	$\chi^2=83,62$ $p=0,000$		
<b>CM14</b>	$\chi^2=38,24$ $p=0,000$		$\chi^2=50,55$ $p=0,011$	$\chi^2=43,80$ $p=0,000$		$\chi^2=51,66$ $p=0,034$		

CM 8 – products with contamination below the norms can be used as usual – is favoured a bit more by Dutch speakers and Flanders than the French speaking and Wallonia. The effect of urbanization is strong: the rural villages are much more in favour than the cities. University graduates disagree somewhat more than people which did not enjoy higher education.

Decreasing contamination as much as possible, as stated by CM 9, is popular all over Belgium. Yet while Flanders and the Dutch speakers mainly agree, Wallonia and the French speaking population agree strongly. The Brussels region positions itself somewhere in between the two other parts of the country.

Clean feeding (CM10) is a popular option too. The difference in level of agreement, as observed above, reappears here. Not surprisingly, this option receives more support in rural areas than in large cities.

The regional differentiation is less clear regarding CM 11, feed additives. The French are slightly less in favour than the Dutch speakers. Flanders expresses somewhat contradictorily less support than Wallonia and Brussels. The higher the social class or the higher the level of education, the less support is expressed.

CM 12, milk processing, is not a well accepted option. Nevertheless, support for this measure is found mainly among Dutch speakers, in rural areas and by the lower social classes.

Dilution, CM 13, is frowned upon by a large majority. Disapproval is especially strong in circles of French speakers, in Wallonia and in Brussels, in large cities, in the highest social classes and amongst the higher educated.

The radical option CM 14 receives relatively more support by French speakers and citizens of Wallonia and Brussels. Dutch speakers and/or inhabitants of Flanders are less inclined to follow this draconian option. Finally, destruction of milk when contaminated below the legal norms is agreed upon more easily by the higher social classes and the better educated.

#### **4.4 Consumer's behaviour in the face of a crisis**

Apart from acceptability of different management options, the actual behaviour of the population in the face of a crisis is of utmost importance in the planning of management strategies. Revealed preferences are the researcher's first choice when conducting likewise analyses, but in the early phase of an accident one may need to rely on expressed preferences.

The respondents were asked to pick one of five options against the background of a particular management option.

Since the questions concerned the management of contaminated milk, a filter question was inserted to determine which people buy milk or dairy products on a regular basis. It turned out that an overwhelming majority of 92,6 % of the respondents buy these products at least once a month.

The proposed situations and corresponding management options were as follows:

- CM15. Locally produced milk and dairy products are clean because of cows being kept in stables.
- CM16. Local milk and dairy products are contaminated, but they comply with the legal norms.
- CM17. Butter or cheese complying with the legal norms, produced from raw milk in excess of legal norms. [Would you buy this butter or cheese?]
- CM18. Milk or dairy products are under the legal norms, because the cows have received feed additives.
- CM19. Local products are above the legal norms, but health specialists say they are not dangerous.

Respondents had the choice between five answering options: stop buying milk or dairy products; deciding whether to buy local or imported products depending on the price; buying local products; buying imported products or don't know/no answer.

The following graph reveals clearly which management options are preferred in the context of buying milk or dairy products. Clean feeding (CM15) is on top with more than 60% buying the local products, followed – with a large gap – by the feed additives option (CM18). A contamination below the norm (CM 16) makes more than one out of two people decide to buy imported products or to stop buy these products. The mere notions of radioactivity and contamination appear to have a negative impact on the trust in the authorities which set the legal limits. Products exceeding the norms are considered taboo by two thirds of the population.

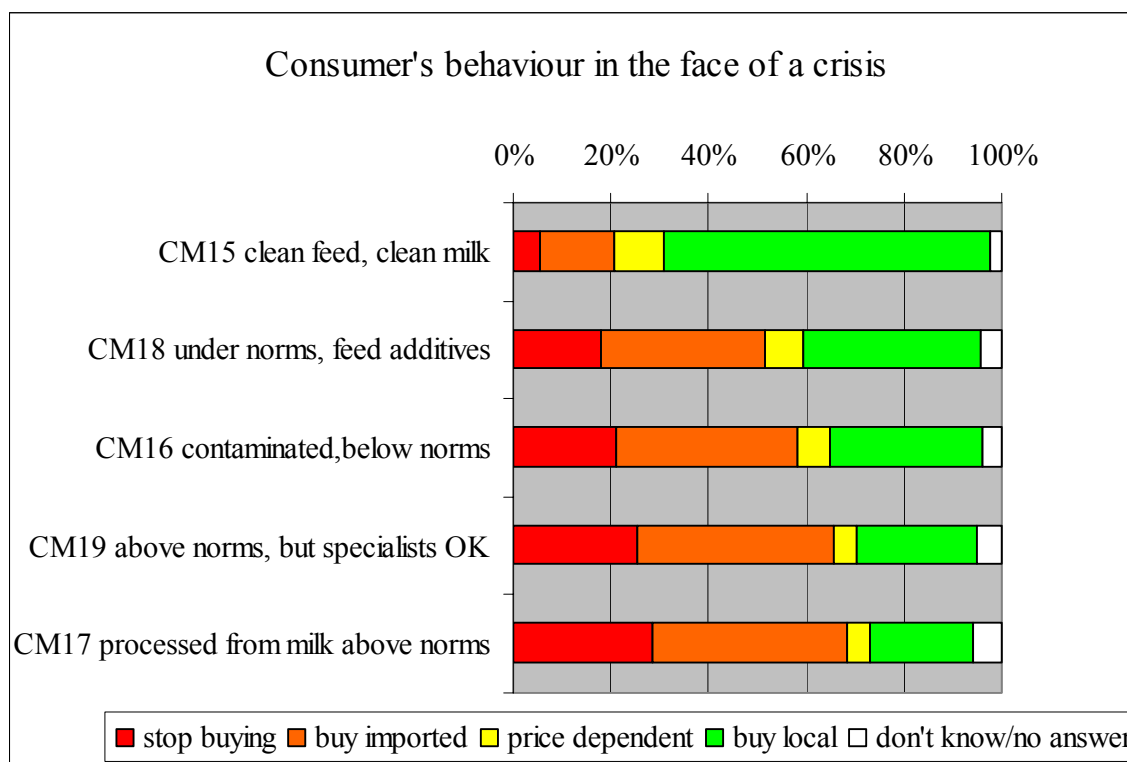


Fig. 12 Consumer's behaviour in five situations

What is the relationship between consumer's behaviour in these five contexts and the familiar selection of independent variables? Since the number of items concerning the – hypothetical – buying behaviour is limited, we study the answers carefully, referring to those percentages in the tables that are most meaningful. The following table displays a large number of significant associations:

***Cross tabulation CM15-19***

	Language	Gender	Education	Region	Habitat	Class	Age	Children
<b>CM15</b>	$\chi^2=37,83$ p=0,000			$\chi^2=41,30$ p=0,000	$\chi^2=46,66$ p=0,000		$\chi^2=22,04$ p=0,005	
<b>CM16</b>	$\chi^2=88,09$ p=0,000			$\chi^2=95,08$ p=0,000	$\chi^2=83,94$ p=0,000	$\chi^2=58,78$ p=0,001	$\chi^2=29,68$ p=0,000	$\chi^2=14,40$ p=0,006
<b>CM17</b>	$\chi^2=125,14$ p=0,000		$\chi^2=48,64$ p=0,002	$\chi^2=121,18$ p=0,000	$\chi^2=61,25$ p=0,000	$\chi^2=66,30$ p=0,000	$\chi^2=17,62$ p=0,024	$\chi^2=13,16$ p=0,011
<b>CM18</b>	$\chi^2=76,36$ p=0,000		$\chi^2=44,25$ p=0,000	$\chi^2=96,19$ p=0,000	$\chi^2=47,76$ p=0,000	$\chi^2=57,33$ p=0,001	$\chi^2=28,41$ p=0,000	
<b>CM19</b>	$\chi^2=81,33$ p=0,000		$\chi^2=61,30$ p=0,000	$\chi^2=81,56$ p=0,000	$\chi^2=36,29$ p=0,000	$\chi^2=61,61$ p=0,000	$\chi^2=24,65$ p=0,002	

In the context of CM 15, clean feeding, the French speaking population will take more often a price dependent decision than the Dutch speakers do. Price is, likewise, more important in Wallonia and Brussels than in Flanders. Age plays its part too: while of the youngest category (18-34) only 61% still buys local, 75% of the 55+ category stays loyal to local products. Older people also answer less often that their buying behaviour would be influenced by price than younger people do. In large cities, 55% of its inhabitants buy local milk products against 77% of the people in rural villages. Interestingly, 16% of the city dwellers states that their decision is price dependent, whereas only 6% of the inhabitants of rural areas do so.

Buying contaminated milk (CM 16) – which, of course, has to comply with the legal norms in order to be brought onto the market – seems to be seldom accepted in Belgium. Especially the French speakers express their aversion: 32% says not to buy such milk, while only 13% of the Dutch speakers say to do so. Similarly, 38% of the Dutch speakers say to buy local products against 23% of the French speaking. The stop buying-option is very common in Brussels (41%) and Wallonia (29%); less so in Flanders (13%). Corresponding to these figures, support for local products is highest in Flanders (37%), followed by Wallonia (26%) and Brussels (14%). The choice for local products is also age-dependent: 40% of 55+ says to buy local in this particular context, while only 25% of the 35-54 years old says so. For the first time, the presence of kids in a family is a discriminating factor: 45% of people having kids states to buy imported products against 33% of people without kids. In rural villages, 40% says to buy local products; 20% stops buying the contaminated products and only 4% says that the price plays a role. In large cities, the figures are respectively 15%, 28% and 11%. A large gap also exists when social class is taken into account: a whopping 52% buys local in the lowest class, against 27% in the highest class.

What about the processing of contaminated products (CM17)? Although it is the management option that is most disapproved of, the level of aversion still differs across certain categories of the independents. Not less than 45% of the French speakers call a halt to the buying of milk products, whereas only 17% of the Dutch speakers do so. However, 28% of the Dutch speakers buys local while only 12% of the French speakers do. Stop buying is a

popular answer in Brussels (47%) and Wallonia (44%); less so in Flanders (18%). City dwellers turn their back to local products (12% still buys them) whereas 26% of the inhabitants of rural villages say to buy the (processed) butter and cheese. Almost 80% of the people with a university degree stop buying or buy imported, while this is true for just half of those having only a primary school. It is also the latter group that still buys local products (36%), against only 10% of the highly educated population. In line with these results, we see that the lowest social class goes more easily for local products (41%) than the highest class (17%).

The use of feed additives in order to obtain products below the legal norm (CM 18) makes 24% of the French speakers stop buying these products against 14% of the Dutch speaking. However, 40% of the latter category expresses to buy imported products against 24% of the former category. Stop buying is a popular answer in Brussels (35%) but less so in Wallonia (20%) or Flanders (14%). On the other hand, Flanders is ahead vis-à-vis buying imported products (40%), followed by Brussels (30%) and Wallonia (22%). Buying local is a favourite of people with the lowest level of education (57%), while only 24% of people holding a university degree do so. The latter group regards buying imported products as the best solution (46%) against 19% of the former group. Buying local products receives 43% of the answers in rural villages and only 23% in large cities. A last striking difference is observed when cross tabulating social class with CM 18: local products are said to be bought by 34% of the highest social class against 64% of the class on the other end of the scale.

The last context studied with regard to the behaviour of consumers relates to health specialists saying that consuming the local products – albeit contaminated above the norm – is not dangerous (CM19). This context sees 17% of the Dutch speaking stop buying the milk products against 38% of the French speaking. This corresponds with the finding that 42% of the inhabitants of the Brussels region and 36% of the Walloon region stop buying, against 17% of the Flemish territory. Respondents holding a university degree tend to buy imported (50%) while 23% of those with only a primary school education do so. The latter still buy local products (43%) against 12% of the former. Urbanized areas see less support for local products (19%) than villages (33%). A last difference concerns social class: buying local is the answer for 41% of the lowest social class against 20% of the highest social class.

#### **4.5 Opinion on management options after expert communications**

Further on, in order to assess the impact of an expert's opinion on the acceptability of management options and consumer's behaviour, a second video clip, containing a simulated interview with an expert was presented to the interviewees. A random selection was made between two versions designed for this video clip: i) a reassuring one, underlining that the health risk is very low and comparable with health risks due to e.g. natural radiation; and ii) a warning one, emphasizing that even if the probability of a health effect is rather low, it is nevertheless greater than zero.

It should be noted that the texts as printed in this document are translated into English from the original Dutch script<sup>7</sup>. Moreover, for the sake of credibility towards the audience of 'viewer-respondents', the interviews are dynamic interactions between the interviewer and the reporter, which causes some phrasings to show variation between the script and the actual

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<sup>7</sup> In the annex, both the original Dutch script and its translation into French are included.

interview. The interviews conducted in Dutch and French differ in some respects. The interviewed expert is a native Dutch speaker, which could have an impact on smoothness and style. Furthermore, the Dutch interview was recorded after the French one, possibly causing repetition and habituation effects which, in turn, also increased smoothness and credibility of the conversations.

Being aware of these pitfalls, utmost care has been taken to minimize variation between the Dutch and French edition. Numerous takes were recorded and only the very best were selected in the editing process at the premises of the contracted recording studio. Finally, the analyses presented in this document which deal with the impact of the video footage start from the Belgian population as a whole, which is only then divided into different groups according to the video they were exposed to.

{Flemish and French speakers} <i>video footage shown</i>	
{Flemish and French speakers exposed to <b>video with positive undertone</b> }	{Flemish and French speakers exposed to <b>video with negative undertone</b> }

This means that the possible language-induced variations between the Dutch and French versions are only relevant when French and Dutch speakers are looked at separately. Indeed, if both language groups are considered as one entity, biases in opinion due to variations in presentation between the Dutch and French version are equally present in the group exposed to the 'positive' video as in the group exposed to the 'negative' video<sup>8</sup>.

Caution is due when the language groups are looked upon separately, for instance when the variables habitat or region are involved in the analysis, such as in the part on profiling the opinion shifters (see *infra*).

### Clip 2: positive undertone

*Reporter*

The authorities have thus announced that many inspections are carried out in the dairy products sector in order to make sure that no products with a radioactive contamination above the norm are put on the market. To get more insight in this matter, we invited a guest to the studio who will provide us with a more detailed explanation. We are glad to welcome an expert from the Study Centre for Nuclear Energy, located in Mol.

*Expert*

Good evening.

*Reporter*

The authorities declare that the radioactive contamination remains under the norm. But can this be adequately checked?

<sup>8</sup> This does not rule out the possibility that the variation between the Dutch and French versions of the interview with a positive undertone is greater (or smaller) than the variation between the Dutch and French versions of the negatively coloured interview. Upon reviewing the interviews, it turned out that this difference is minimal.

*Expert*

For a specialized laboratory it is not that hard to measure the levels of radioactivity in a swift and correct way. If enough samples are taken, one can indeed make sure that no products with a too high contamination will be put on the market.

*Reporter*

But this does not exclude the possibility that milk or other dairy products contain some radioactive substances?

*Expert*

Indeed, but only in very limited quantities. The products that do not comply with the norms won't be brought on the market, and these norms are sufficiently strict.

*Reporter*

What happens if we nevertheless consume products that are contaminated with radioactivity? Do we become contaminated ourselves then?

*Expert*

A part of those radioactive substances will indeed be absorbed by our body and the radiation this causes will lead to a certain dose.

*Reporter*

Dose, you say. What is that exactly?

*Expert*

A dose is a measure for the health risk induced. The higher the dose, the higher the chances of cancer or genetic defects. In our daily lives, we all receive a dose by natural radiation in the environment, or by medical applications.

*Reporter*

But the intake of radioactive products after the accident thus increases the dose we absorb? Isn't that dangerous?

*Expert*

The legal norms are determined in such a way that the additional risks induced can actually be neglected. I'll give an example. In daily life, an ordinary Belgian receives an average dose of about 4 mSv yearly (this is a scientific measurement unit). Due to this accident, in the worst case scenario, this dose would increase with about 2 mSv. This is not an important increase, and as such doesn't lead to additional health risks.

*Reporter*

Would you buy such products yourself?

*Expert*

Indeed. I believe the risks are that low that we don't have to fear them. It's better to support our own products.

*Reporter*

With this important information we round of this item. Thank you for coming over to the studio.



**Clip 3: negative undertone**

*Reporter*

The authorities have thus announced that many inspections are carried out in the dairy products sector to make sure that no products with a radioactive contamination above the norm are put on the market. To get more insight in this matter, we invited a guest to the studio who will provide us with a more detailed explanation. We are glad to welcome an expert from the Study Centre for Nuclear Energy, located in Mol.

*Expert*

Good evening.

*Reporter*

The authorities declare that the radioactive contamination is under the norm. But can this be adequately checked?

*Expert*

For a specialized laboratory it is not that hard to measure the levels of radioactivity in a swift and correct way. If enough samples are taken, one can indeed make sure that no products with a too high contamination will be put on the market.

*Reporter*

But it is true that some radioactive substances could be present in milk or other dairy products?

*Expert*

Indeed, but only in very limited quantities. The products that do not comply with the norms won't be brought on the market, and these norms are fairly strict.

*Reporter*

What happens if we consume nevertheless products that are contaminated with radioactivity? Do we become contaminated ourselves then?

*Expert*

A part of those radioactive substances will indeed be absorbed by our body and the radiation this causes will lead to an additional dose, which we didn't receive if we wouldn't allow contaminated products on the market.

*Reporter*

If we consume these products, do we receive then an additional dose?

*Expert*

The chance of getting a cancer increases, in fact. And for people wanting to have children, it is important to know that there is also a probability of hereditary malformations. This probability of getting a cancer is not very big, but neither zero.

*Reporter*

Would you buy such products yourself?

*Expert*

I think the occasional consumption of these products is harmless, but I would limit their use, certainly for my children.

*Reporter*

With this important information we round of this item. Thank you for coming over to the studio.

One more time, two situations were analysed: raw milk exceeding the legal norms and raw milk not exceeding the legal norms, in absence of actions from the authorities.

#### 4.5.1 Expected contamination of raw milk exceeds legal limits, if no action is undertaken

- CM20. The farmers keep the cows in the stables and give them clean feed so that the produced milk is below the legal norm.
- CM21. The milk is processed to butter and cheese which do comply with the legal norm.
- CM22. All products contaminated above the legal norm are destroyed without trying to create products that comply with the legal norm.
- CM23. If health specialists say it is not dangerous for our health, products above the norm can be consumed as usual.

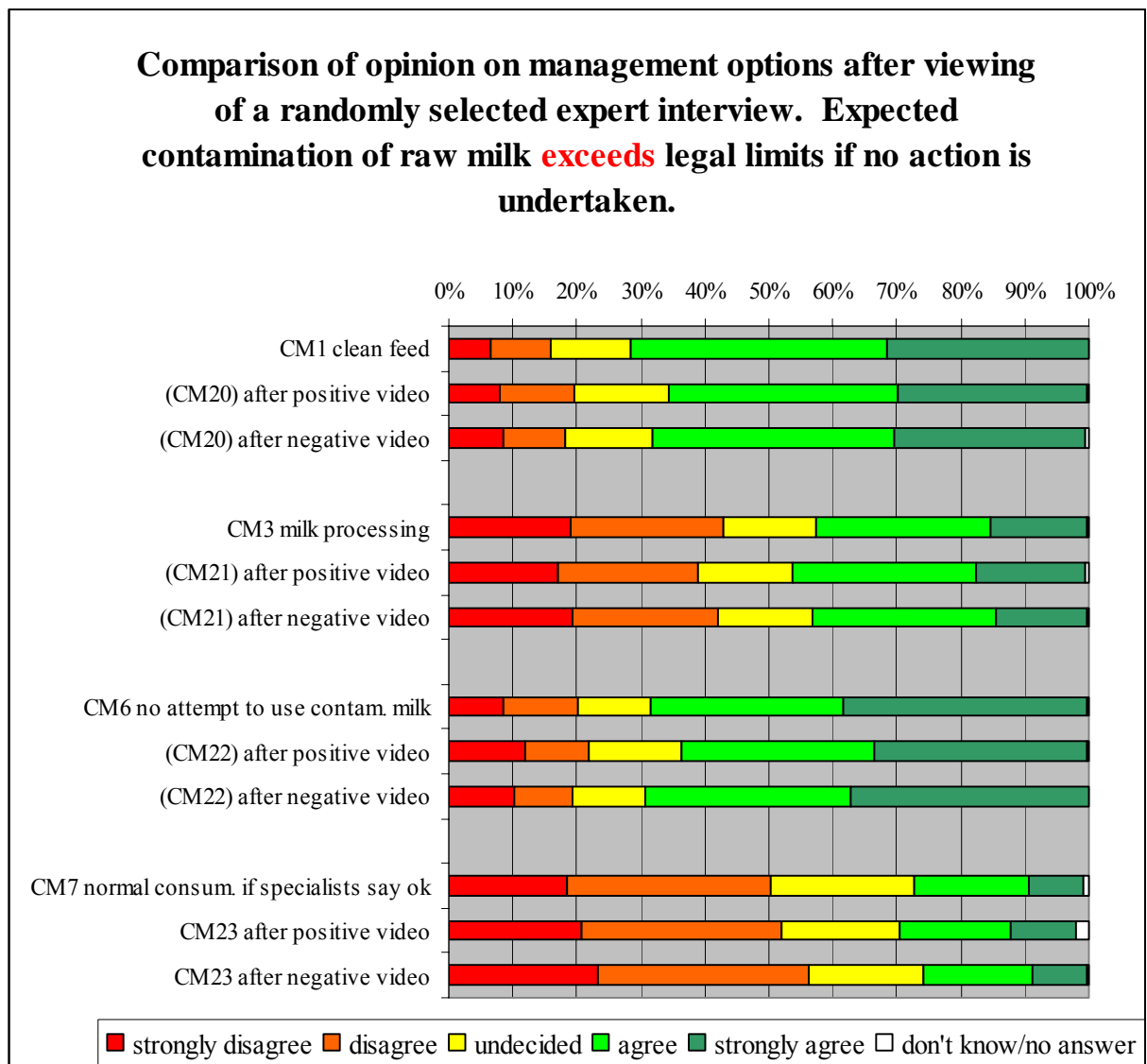


Fig. 13 Acceptance of management options before and after expert communication; milk expected above legal norms

The format of the graph above allows easy inspection of differences in opinion before and after the viewing of the video clips. It does not show, however, opinion shifts of individuals. The data used are calculated for the population as a whole, thus making abstraction of individual variations. It is plausible that a much larger number of people changed opinion, but since the graph displays the mean proportion of each category compared to the sample, this information is lost in the (complexity-reducing) calculus of the mean. Since it might be interesting to profile the part of the population that changes opinion after (but not because) having watched the video footage, we will undertake a separate study that describes the nature of these people in more detail. As for now, we go over the main findings of this set of items, providing general information about the graphs.

Since these questions are repetitions of earlier statements on the management options, it is not surprising that the breaks with the familiar set of independent variables (such as age, gender, habitat...) are almost parallel to the earlier findings. Again, discriminating variables are chiefly language, region, level of urbanization, education and social class. Furthermore, within these breaks, almost exactly the same patterns emerge. As said before, it is thus more useful to study the individual profiles of opinion shifters. A preliminary assessment of these profiles is included at the end of this section (B4).

The graph above does not display important shifts in opinions, neither before and after viewing the video (*pre-post*), nor between the two groups *ex post* (the 'positive video' and the 'negative video' group). Basic statistical tests for significance of the difference in opinion between the two groups yield significant results for just one item (CM 24, see next subsection). However, the trends in the changes give an indication of certain movements through the direction in shift. More sophisticated analyses might reveal whether these changes are significant. For the sake of this largely describing report, we summarize the main evolutions.

Agreement with 'clean feeding' (CM 20/CM 1) declines slightly in both situations *ex post*. Those who watched the negative video express more support for that particular countermeasure than those who saw the other video: this is a recurring observation. The negative undertone of the interview makes people more aware of the potential harmful effects of the incident, steering them towards a supportive attitude regarding the management options which allow the amount of radiation to be reduced.

Support for processing of contaminated milk which does not comply with the legal norms to butter and cheese (CM21/CM3) grows after watching the positive video. The negative video seems to have but a minimal effect in relationship to the original opinion.

The distribution of CM22 vs CM6 can easily be interpreted. People who have seen the positive video hold a more favourite view on the management options; as such, they tend less often to think that all products (above the norm) should be destroyed without trying to create products that would comply with the legal norm. Those who watched the negative video express more often agreement with this position, to a level which equals the level before the showing of the videos.

The distrust in health specialists (CM23/CM7) – saying that consuming contaminated products (above the norm) is not dangerous – grows slightly after watching the negative or the

positive video. We notice that the negative video brings about the largest rise in disbelief among the public.

4.5.2 *Expected contamination of raw milk doesn't exceed legal limits, even when no action is undertaken*

- CM24. Products below the legal norm can be used as usual.
- CM25. The contamination must be decreases as much as possible, even if it is already under the legal norm.
- CM26. Even if the milk is below the legal norm, it should be destroyed.

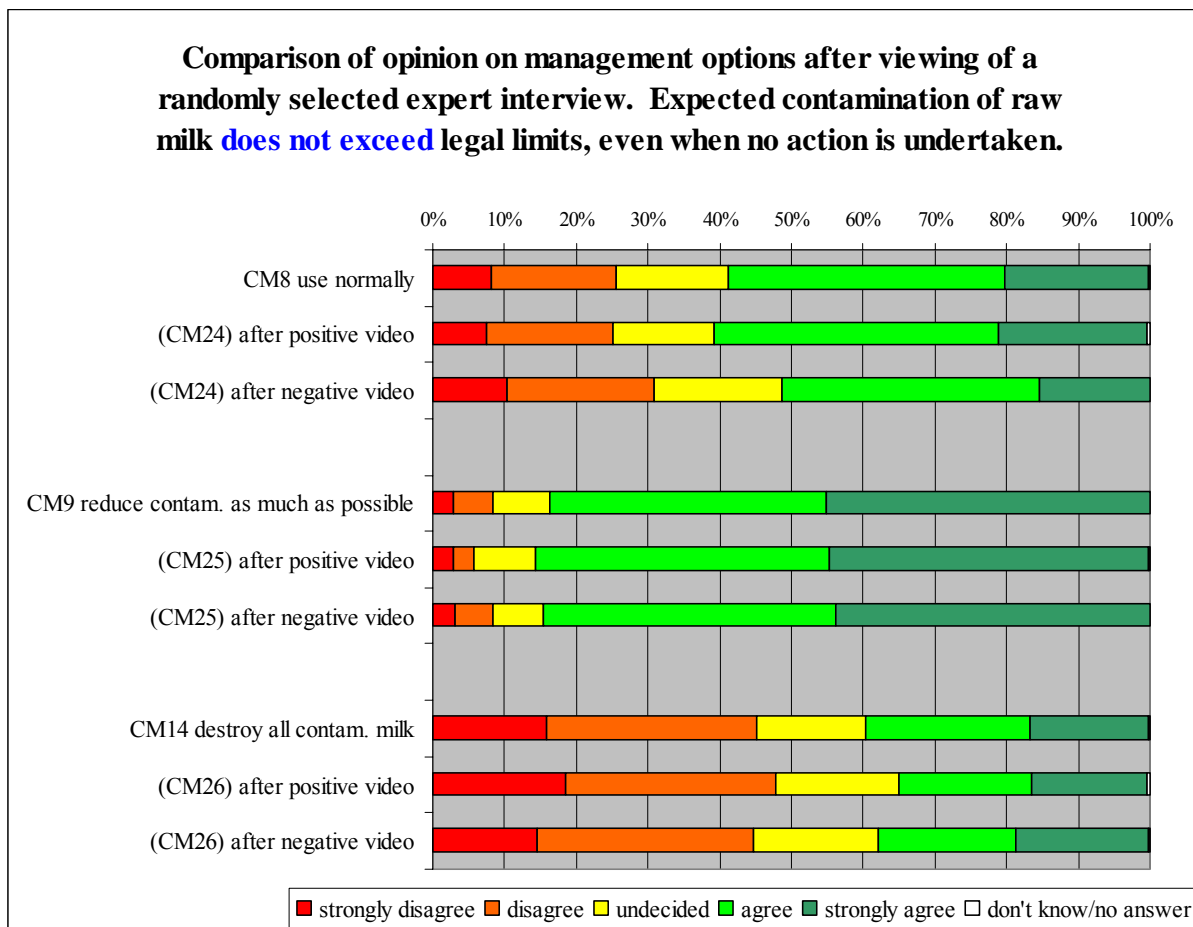


Fig. 14 Acceptance of management options before and after expert communication; milk expected below legal norms

An optimistic interview seems to (slightly) strengthen the belief that products contaminated below the norm can be used as usual (CM24/CM8). The effect of the negative interview is much stronger: the belief in normal use has dropped significantly against the two other situations.

More than 8 out of 10 respondents agree that, in the context of a contamination below the norm, the contamination should be reduced as much as possible (CM25/CM9). This position does not alter in case the interviews are shown.

Disagreement with the statement that all milk should be destroyed even contamination is below the legal norm (CM26/CM14) increases slightly in the group that has been shown the positive video; it stays more or less the same in the group that has seen the negative video.

### ***Profiling of opinion shifters in the field of management options***

A preliminary assessment of these profiles has shown that (with a confidence level of 95%) opinion shifters<sup>9</sup> have more frequently than non-shifters the following characteristics:

- French speaking
- Female
- Less confidence in the courts and politics
- Living in urbanized areas rather than in villages
- Lower social class
- Brussels and Walloon region
- Lower norm acceptance (regarding food safety)
- Lower agreement with the content of the legal norms
- Lower esteem of enforcement of legal norms
- Lower perceived legitimacy of the legal norms
- More neurotic
- Higher general risk perception with regard to the 19 listed risks
- Lower general confidence in the actions the authorities undertake to protect the population from the listed risks.

#### **4.6 Norm acceptance in the face of a crisis, after expert communication: comparison between the subpopulations exposed to different videos**

Under heading B2, the variable 'norm acceptance' was introduced. Initially – and theoretically - a summated scale variable composed of nine items which fell apart in three subdimensions (content, enforcement and legitimacy), it did only partially withstand the confrontation with the empirical data. Because of low correlation, two items were left out in the definition of norm acceptance. Furthermore, a principal components analysis could not identify three latent dimensions in the general concept of norm acceptance, meaning that the existence of three subdimensions in the definition of norm acceptance was falsified empirically. All in all, the resulting variable, the sum of seven resulting items, did produce a very healthy value for Cronbach's  $\alpha$  and proved to be unidimensional, meaning that the overall concept of norm acceptance is measured in a reliable and valid way.

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<sup>9</sup> An opinion shifter has been - preliminary – defined as someone who changes opinion on CM21 and CM22 and CM 24 and CM 25 in respect to the answers provided for the corresponding pre-video items CM 3, CM 6, CM 8 and CM 9. This brings down the group of 'shifters' to a mere 74 (against 989 'non-shifters'). While the 'experimental' group is rather small compared to the 'control' group, T-tests for significance confirm that the observed differences between both groups are also present in the population in at least 95% of the times equally large samples are taken.

As seen in the previous chapter, this research project distinguishes itself from the bulk of opinion surveys by the inclusion of video footage. We sought to bring this feature into play in the field of norm acceptance as well. To do so, six of the nine original items were repeated in the questionnaire after the showing of the news flash and the expert interview:

- NE1            The legal norms offer sufficient protection for all citizens, including children and the elderly.
- NE2            Food products complying with the legal norms can be safely consumed.
- NE3            The authorities are inadequately organized to secure food safety.
- NE4            There is sufficient control of food products.
- NE5            Political and economic power games decide how strict the norms are.
- NE6            Legal norms are not enough based on what experts know.

The wording of the questions was not altered to facilitate comparison. For each theoretical subdimension, only two of the three initial items were repeated so as not to overload the questionnaire.

The following graph displays the distributions of the answers to the six post video norm acceptance items and their six pre video counterpart questions. For each item, the first bar represents the distribution of the values for the item before any reference to the accidental contamination was made, making these values equal to the ones in chapter B.2. The next two bars stand for the distributions of the parallel item after the respondent had been shown the newsflash and the interview. While the values for the second bar are calculated on the subsample of those respondents having seen the positive interview, the third relates to the respondents having been shown the negatively oriented interview.

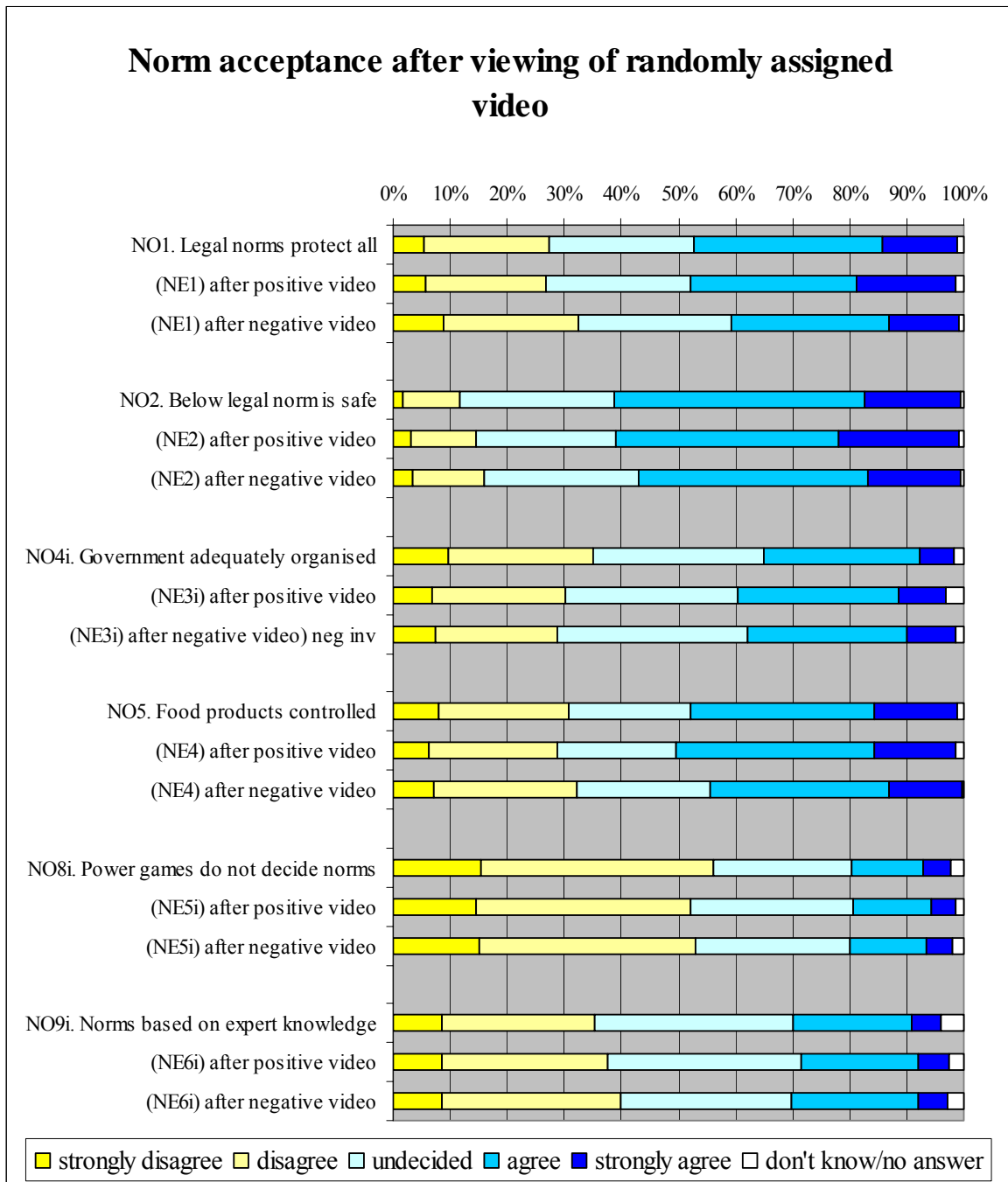


Fig. 15 Norm acceptance before and after experte communication

A visual inspection reveals no dramatic shifts, neither between the pre and post video distributions, nor between the distributions for the positive and negative interview. However, a number of changes have taken place, which justifies some comment.

Regarding NE1, a slightly larger proportion of people having witnessed the positive interview than those who have seen nothing yet, agree strongly with the statement that legal norms offer sufficient protection for all citizens. Agreement with this statement is clearly more outspoken in the positive video subsample than in the negative video subsample. In this line,

disagreement is larger among those that did see the negative video than among those who saw the positive one. The same is true, to a lesser extent, for the second post video item, NE2.

Opinions on the statement that the government is inadequately organised to secure food safety (NE3) differ not that much in the three contexts, but one message is clear: in the face of a crisis, the number of people believing in an adequate organisation of the government decreases – even when the reassuring video has been shown.

NE4, again, reveals no important shifts yet points to an overall trend. Close inspection of the graph learns that the subpopulation which had been shown the negative video finds control slightly less sufficient than the subpopulation exposed to the positive video, and vice versa.

NE5, the item worded as 'political and economic power games decide how strict the norms are' displays almost no variation within the positive and negative context, but is characterized by a fairly large gap between the *ex ante* and *ex post* values. As such, the number of people that disagree (moderately and fully) with the inverted statement that norms are *not* the result of power games drops in the context of an accidental contamination. In other words, when the news is out and about of an accidental contamination, people will sooner tend to believe that the legal norms are the product of political games.

Finally, inspection of NE6 learns a couple of things. First, the proportion of "don't know"s and "no answer"s is the most extensive among the NE-items. Second, after the news has been brought that a contamination has taken place, more disagreement with the (inverted) statement that legal norms are based on experts' knowledge is recorded. This disagreement becomes even more outspoken when the interviewee had been exposed to the interview with the negative undertone.

While the variations over the three contexts were – in all cases but the first item – not statistically significant<sup>10</sup>, one trend with a potentially serious policy impact emerges. As a general rule in the context of a contamination, it appears that media coverage with a positive undertone boosts the level of norm acceptance in its various aspects, while negatively coloured reporting seems to reduce this level. Of course, continued research in this domain is needed to verify these preliminary findings.

Before studying shifts in opinion from a different angle, we conclude this paragraph with the results of crosstabulation with the familiar subset of independent variables. The dependent variable is the summated scale variable norm acceptance, measured as the sum of NE1 to NE6 minus NE5<sup>11</sup>.

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<sup>10</sup> On the basis of student T-tests of means. A t-test, however, presupposes that the data are independent. Where this test can be applied trouble free to the test of significant differences between the two subsamples exposed to a different video, this condition is not fulfilled with regard to the *ex ante* and *ex post*-comparisons; indeed, it is easy to understand that the values for the NE-items depend on the results for the answers to the NO-questions. More advanced multivariate analyses are needed to present a definitive verdict. Since the statistical scope of this report is limited, we accept the results of the t-test in a preliminary way. As for other themes which were but superficially touched in this report and require more in-depth research, we refer to subsequent publications that will provide an appropriate space for this kind of studies.

<sup>11</sup> In order to secure the comparability between the variable norm acceptance *ex ante* and norm acceptance *ex post*, the fifth item of the *ex post* variable has been left out of the final five-item composition..



In general, a stronger norm acceptance is measured among the Dutch speaking, in the Flemish region, in rural parts of the country, among people with a lower educational level and among people belonging to the less privileged social classes. French speakers, inhabitants of the Brussels or Walloon region, city dwellers, people having enjoyed higher education and people from the higher social strata are the most important groups that accept the norms the least.

Calculating separate breaks for the subsamples 'positive video' and 'negative' does not yield valuable information. In this respect, the relevant hypothesis and research design are of a temporal (before/after) rather than of a cross-sectional nature. As was the case with the countermeasures, it is more useful to construct the profile of the respondents who expressed different opinions before and after the showing of the videos.

### ***Profiling of opinion shifters in the field of norm acceptance***

After defining<sup>12</sup> and identifying opinion shifters, a t-test (Tacq, 1997) was conducted to compare the mean values for a range of variables for the group of shifters and the group of non-shifters. The profile of opinion shifters looks as follows:

- French rather than Dutch speaking
- rather from Wallonia & Brussels than Flanders
- lower norm acceptance
- higher general risk perception
- lower general confidence in the authorities for the management of risks
- more neurotic
- more open
- Score higher on the 'known-unknown' component (see *supra*)

Further variations on this analysis and different approaches will reveal even more information which may be valuable in the eyes of the decision maker.

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<sup>12</sup> A shifter was defined as someone whose answers for NE1 and NE4 differ from the answers to the equivalent pre-video items, namely NO1 and NO5. This – preliminary – definition has a good discriminating power: about two in ten respondents fall into the 'opinion shifters' category as defined.

## 5 Energy

- EN1. Wind power and solar energy will not be sufficient to compensate the shut down of the nuclear power plants.
- EN2. The high energy prices of the future will impose a more economical use of energy.
- EN3. I am willing to give up some comfort to save energy (driving less often with the car, lower heating...)
- EN4. I am willing to invest seriously to save energy (installation of solar hot water heating....)
- EN5. In the future, we will encounter problems in securing sufficient amounts of fuel and electricity.
- EN6. Keeping nuclear power plants in operation will be necessary to be less dependent of some countries.
- EN7. The reduction of the number of nuclear power plants in Europe is a good cause.
- EN8. Nuclear power plants endanger the future of our children irrevocably.
- EN9. Research in the nuclear domain must be continued.

The results obtained are presented in the figure below. We see that the 66% majority supporting the 'reduction of nuclear power stations in Europe' in 2002 diminished to 51 % (while disagreement rose from 12 % to 24%). The statement that "NPP irrevocably endanger the future of our children" was agreed by 37% of the respondents (in 2002 47%), while opposed by 36 % (in 2002 24%). These results illustrate the shift towards a wider acceptance of nuclear power for energy production.

A majority of respondents agrees that "keeping the option for NPPs open to be less dependant on some countries will be necessary" (63% vs 13%) and a comparable majority thinks that "wind and solar energy will be insufficient to compensate for the shutdown of NPP's" (63% vs 18%).

More than 90% of the interviewees think that the "higher energy prices in the future will impose a more economical use of energy", nearly 60% expresses "to be willing to give up some comfort to save energy (driving less often the car, lowering the heating,...)" and over 40% say they are "willing to invest seriously to save energy (e.g., installation of solar water heating)".

Support for nuclear research rose from 46% in 2002 to a majority of 75% of the population in 2006, while disagreement dropped from 24% in 2002 to 9% in 2006.

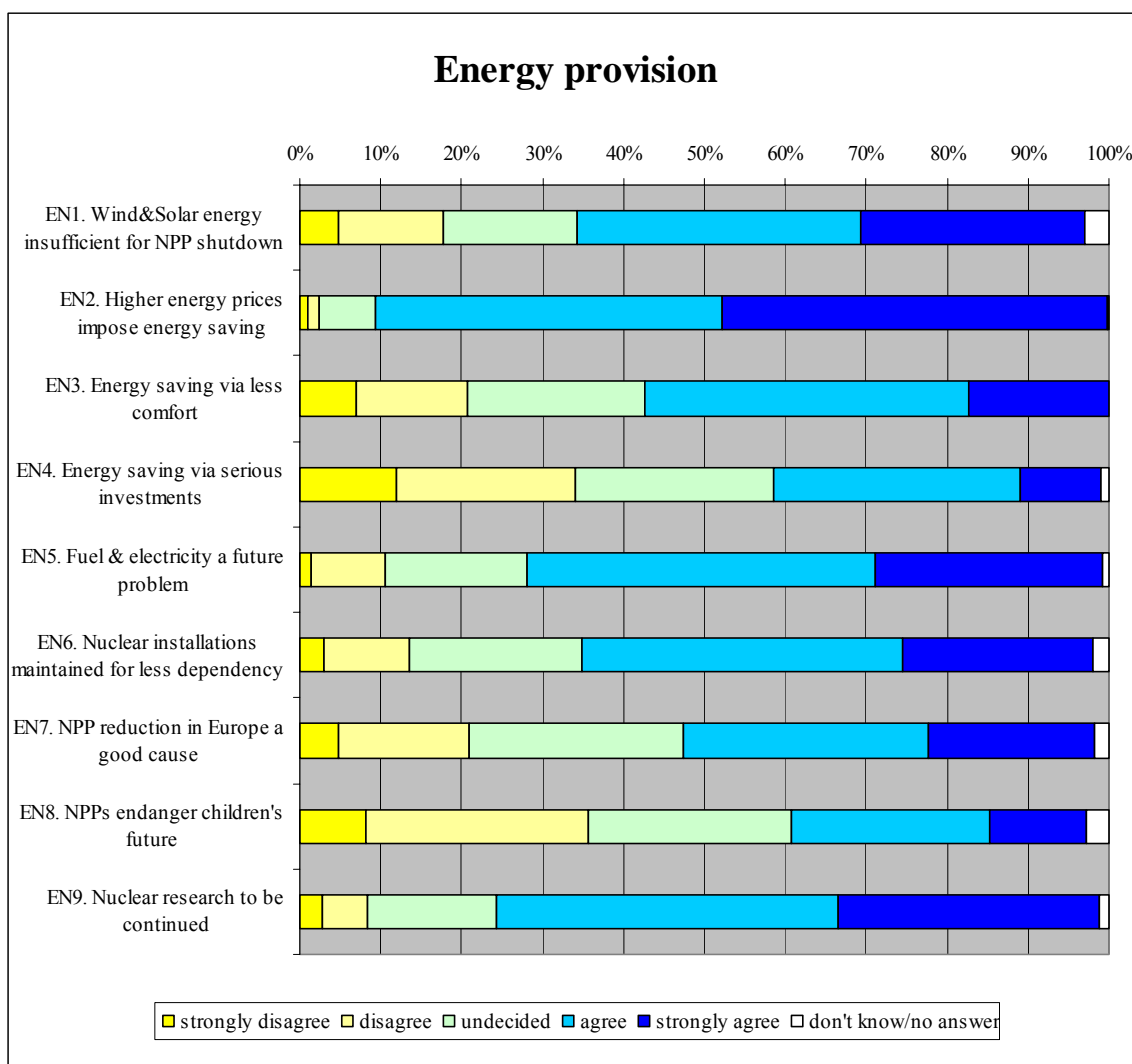


Fig. 15 Opinions on energy provision

**Cross tabulation Energy**

	Language	Gender	Education	Region	Habitat	Class	Age	Children
EN1	$\chi^2=12,08$ $p=0,017$	$\chi^2=20,33$ $p<0,001$			$\chi^2=24,81$ $p=0,016$	$\chi^2=42,99$ $p=0,035$	$\chi^2=29,39$ $p<0,001$	$\chi^2=28,40$ $p<0,001$
EN2	$\chi^2=34,89$ $p<0,001$		$\chi^2=38,16$ $p=0,033$	$\chi^2=63,58$ $p<0,001$	$\chi^2=52,30$ $p<0,001$	$\chi^2=51,40$ $p=0,004$	$\chi^2=23,66$ $p=0,003$	$\chi^2=17,47$ $p=0,002$
EN3	$\chi^2=63,96$ $p<0,001$			$\chi^2=69,69$ $p<0,001$	$\chi^2=25,18$ $p=0,014$	$\chi^2=43,49$ $p=0,031$	$\chi^2=19,53$ $p=0,012$	
EN4	$\chi^2=30,50$ $p<0,001$		$\chi^2=64,19$ $p<0,001$	$\chi^2=44,95$ $p<0,001$	$\chi^2=26,94$ $p=0,008$	$\chi^2=100,08$ $p<0,001$	$\chi^2=25,16$ $p=0,001$	
EN5	$\chi^2=10,00$ $p=0,040$		$\chi^2=42,43$ $p=0,012$		$\chi^2=22,77$ $p=0,030$		$\chi^2=17,56$ $p=0,025$	
EN6	$\chi^2=29,51$ $p<0,001$	$\chi^2=17,40$ $p=0,002$	$\chi^2=42,97$ $p=0,010$	$\chi^2=43,98$ $p<0,001$	$\chi^2=72,66$ $p<0,001$		$\chi^2=48,93$ $p<0,001$	$\chi^2=15,65$ $p=0,004$
EN7	$\chi^2=34,98$ $p<0,001$	$\chi^2=24,63$ $p<0,001$	$\chi^2=60,94$ $p<0,001$	$\chi^2=43,83$ $p<0,001$	$\chi^2=32,10$ $p=0,001$	$\chi^2=47,45$ $p=0,012$		
EN8	$\chi^2=67,09$ $p<0,001$	$\chi^2=25,28$ $p<0,001$	$\chi^2=39,35$ $p=0,025$	$\chi^2=67,63$ $p<0,001$	$\chi^2=33,27$ $p=0,001$			
EN9	$\chi^2=69,56$ $p<0,001$		$\chi^2=38,57$ $p=0,030$	$\chi^2=111,02$ $p<0,001$	$\chi^2=69,87$ $p<0,001$			

## 6 Radioactive waste

- WA1. One must make a differentiation between the different kinds of radioactive waste according to the risk.
- WA2. Disposal of low-level waste demands a different approach than high-level waste.
- WA3. High-level and low-level radioactive waste alike must be buried deep underground where no one has access to it.
- WA4. Low-level waste may be stored too in a safe repository on the surface instead of deep underground.
- WA5. A repository for low-level nuclear waste is less dangerous than a waste disposal site for chemical waste.
- WA6. Provided that control is exerted, one can guarantee the safety of a surface repository for 300 years.
- WA7. It is important that one can always take back the radioactive waste to apply new processing techniques.
- WA8. Our country is too densely populated for a radioactive waste disposal site.
- WA9. It is unacceptable that one exports Belgian radioactive waste for disposal abroad.
- WA10. It is necessary that the population of a region where a repository of nuclear waste is foreseen can have an active participation in the construction.
- WA11. It is necessary that a region which accepts radioactive waste on its territory receives economic compensations.
- WA12. Compensations for a region accepting radioactive waste on its territory must be paid by all Belgian electricity consumers.

The results show that a large majority of respondents agrees that the local population should participate in the decision process regarding a waste disposal siting (vs 10% disagrees) and that this region should receive economic compensations. More than one out of two respondents also agrees that these compensations should be contributed to by all electricity consumers.

In what concerns the radioactive waste disposal solution, the opinions are somewhat ambiguous: a large majority (over 70%) agrees that we have to make a difference between the types of waste according to the risks, and that low radioactive waste asks for another approach than high radioactive waste. However, about 60% of respondents would rather have them both in a deep underground disposal, despite the wide consensus on the necessity for retrievability (over 60%).

This ambiguity is also illustrated by the large acceptance of both the fact that two "Belgium is too densely populated to build a nuclear waste disposal site" (55% agree vs 19% disagree), as well as that "it is unacceptable that Belgian nuclear waste is exported for disposal abroad" (55% agree vs 23% disagree).

As regards the long-term safety of a surface repository for low level radioactive waste, a relatively small percentage of the respondents questions the safety (around 35% disagree vs around 25 % agree)

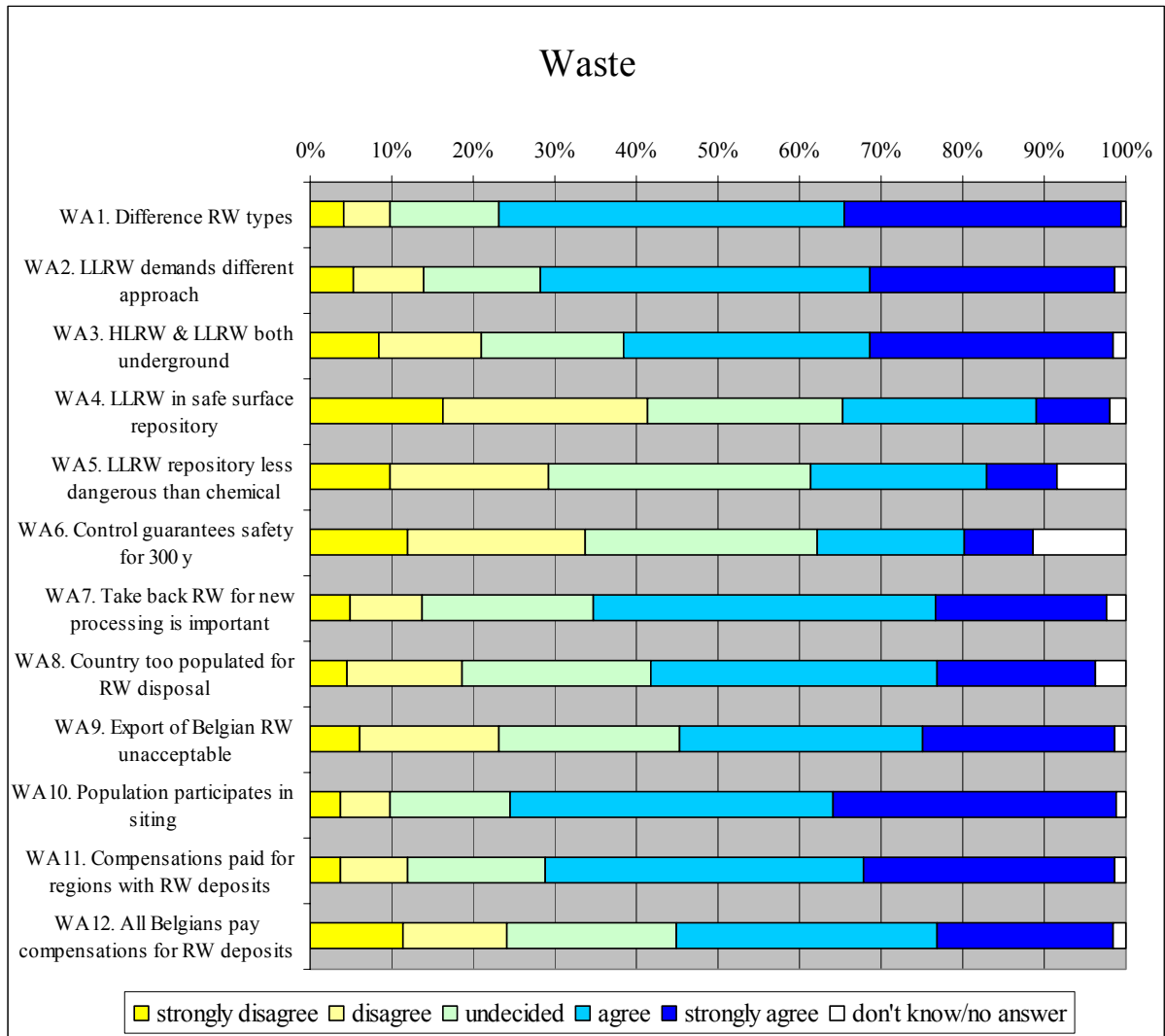


Fig. 16 Opinions on radioactive waste management

**Cross tabulation Waste**

	Language	Gender	Education	Region	Habitat	Class	Age	Children
WA1	$\chi^2=64,57$ p<0,001				$\chi^2=29,62$ p=0,003			
WA2	$\chi^2=66,41$ p<0,001			$\chi^2=65,79$ p<0,000				
WA3	$\chi^2=30,47$ p<0,001			$\chi^2=34,25$ p<0,001	$\chi^2=28,19$ p=0,005			
WA4	$\chi^2=80,02$ p<0,001		$\chi^2=53,46$ p=0,001	$\chi^2=84,02$ p<0,001	$\chi^2=36,37$ p<0,001	$\chi^2=52,30$ p=0,004		
WA5	$\chi^2=42,94$ p<0,001			$\chi^2=37,30$ p<0,001	$\chi^2=40,79$ p<0,001			
WA6	$\chi^2=70,21$ p<0,001		$\chi^2=44,65$ p=0,006	$\chi^2=71,24$ p<0,001	$\chi^2=47,21$ p<0,001	$\chi^2=64,22$ p<0,001		
WA7	$\chi^2=49,71$ p<0,001	$\chi^2=13,90$ p=0,008		$\chi^2=49,96$ p<0,001	$\chi^2=42,73$ p<0,001			
WA8	$\chi^2=24,68$ p<0,001	$\chi^2=11,69$ p=0,020		$\chi^2=29,27$ p<0,001			$\chi^2=15,74$ p=0,046	
WA9	$\chi^2=50,88$ p<0,001			$\chi^2=51,24$ p<0,001				
WA10	$\chi^2=40,99$ p<0,001			$\chi^2=39,90$ p<0,001		$\chi^2=44,75$ p=0,023		
WA11	$\chi^2=16,86$ p=0,002		$\chi^2=40,23$ p=0,020	$\chi^2=17,05$ p=0,030	$\chi^2=37,91$ p<0,001	$\chi^2=48,73$ p=0,009	11	
WA12	$\chi^2=13,61$ p=0,009		$\chi^2=42,12$ p=0,013	$\chi^2=18,46$ p=0,018	$\chi^2=29,89$ p=0,003	$\chi^2=53,82$ p=0,002		

WA1. Dutch speaking people and people from rural areas agree more that one must make a differentiation between the different kinds of radioactive waste according to the risk associated.

WA2. Dutch speaking people agree more that the disposal of low-level waste demands a different approach than high-level waste.

WA3. French speaking people and people from rural areas think that both low-level and high-level waste should be buried deep underground.

WA4. Dutch speaking people, people with a mere basic education, from the lower social strata and from rural areas think more than their counterparts that low-level waste can also be stored in a safe repository on the surface. People from Flanders think so too, more than people from Wallonia, who in turn agree more often than inhabitants of the Brussels region.

WA5. Dutch speaking people and people from rural areas think that a repository for low-level waste is less dangerous than a waste disposal site for chemical waste. People in Flanders and Brussels agree significantly more often with this statement. Note the relative wide stretch of white space in the distribution: this question posed a serious challenge for most respondents.

WA6. Dutch speaking people as well as people from low class, rural areas and with low education think that one can guarantee the safety of a surface repository for 300 years. As

with the previous question, a relatively large number of people were unable to provide an answer to this question.

WA7. Dutch speaking people, males and inhabitants of rural areas express more often than their counterparts that it is important that one can always take back the radioactive waste to apply new processing techniques. Flemish people more than Walloon people, more than people from Brussels, agree with this statement.

WA8. Women, French speaking and older people consider Belgium too populated for a radioactive waste disposal site. Walloon people more agree with this statement than Flemish and Brussels people.

WA9. French speaking people think more that it is unacceptable that one exports Belgian radioactive waste for disposal abroad. Walloon people agree more than Flemish and Brussels people.

WA10. Dutch speaking people and people from social classes towards the lower end of the spectrum consider it necessary that the population of a region where a repository of nuclear waste is foreseen can have an active participation in the construction. Flemish people agree more with this statement than Brussels and Walloon people.

WA11. French speaking people and people from lower social strata, with a lower educational background and from a more rural area consider it necessary that a region which accepts radioactive waste on its territory receives economic compensations.

WA12. Dutch speaking people, people from lower classes or urban areas and people with low education think more than their counterparts that compensations for a region accepting radioactive waste on its territory must be paid by all Belgian electricity consumers.

## 7 The Chernobyl accident

The survey concludes with some questions on the Chernobyl accident and related issues. First, respondents were asked by means of a multiple choice question what they understood by 'Chernobyl'. An overwhelming majority of people answered correctly; though it is plausible that the preceding content of the questionnaire made a good guess easy.

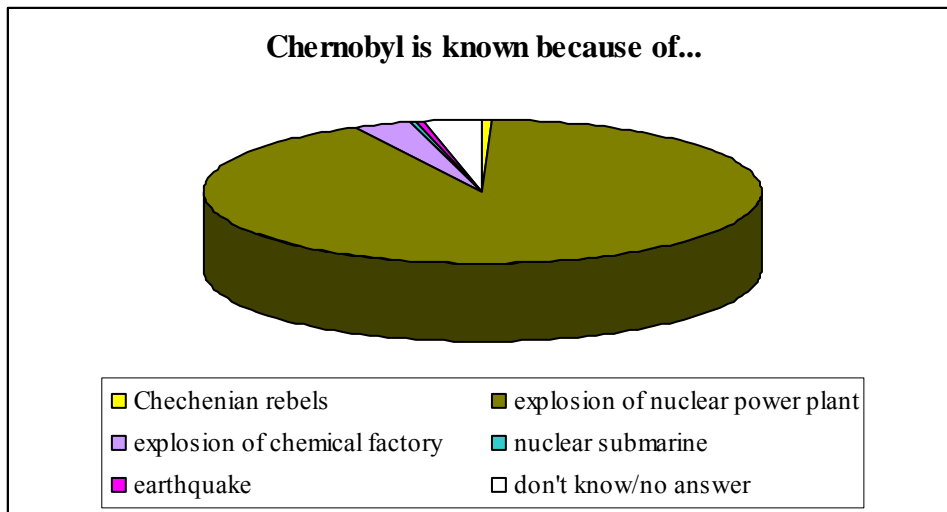


Fig. 17 Filter question regarding knowledge about the Chernobyl accident

- T1. In certain areas of the former Soviet Union there are still problems with radioactive contamination.
- T2. The problems of the local population in the affected areas are mainly due to the collapse of the Soviet Union.
- T3. Children in the affected areas in the former Soviet Union have many health problems.
- T4. Scientific reports of international organizations tell the truth about the situation in Chernobyl.
- T5. The number of birth defects has risen sharply after the Chernobyl accident.
- T6. Due to the Chernobyl accident the number of cancers in Belgium has largely increased.
- T7. The radioactive deposition in Belgium due to the Chernobyl accident was far less important than the one from the atomic bomb tests in the 50's and 60's.
- T8. The Belgian authorities have always told the truth during the Chernobyl crisis.
- T9. An accident as serious as the Chernobyl one will never happen in Belgium.
- T10. In case of an accident in a nuclear power plant, the authorities are able to provide satisfactory protection to the population.
- T11. The Belgian nuclear installations are technically far superior to the ones in the former Soviet Union.
- T12. The government would inform us correctly if there was a safety problem in a nuclear installation.



T13. The biggest risk of a nuclear disaster is due to terrorism rather than the operation of a nuclear plant.

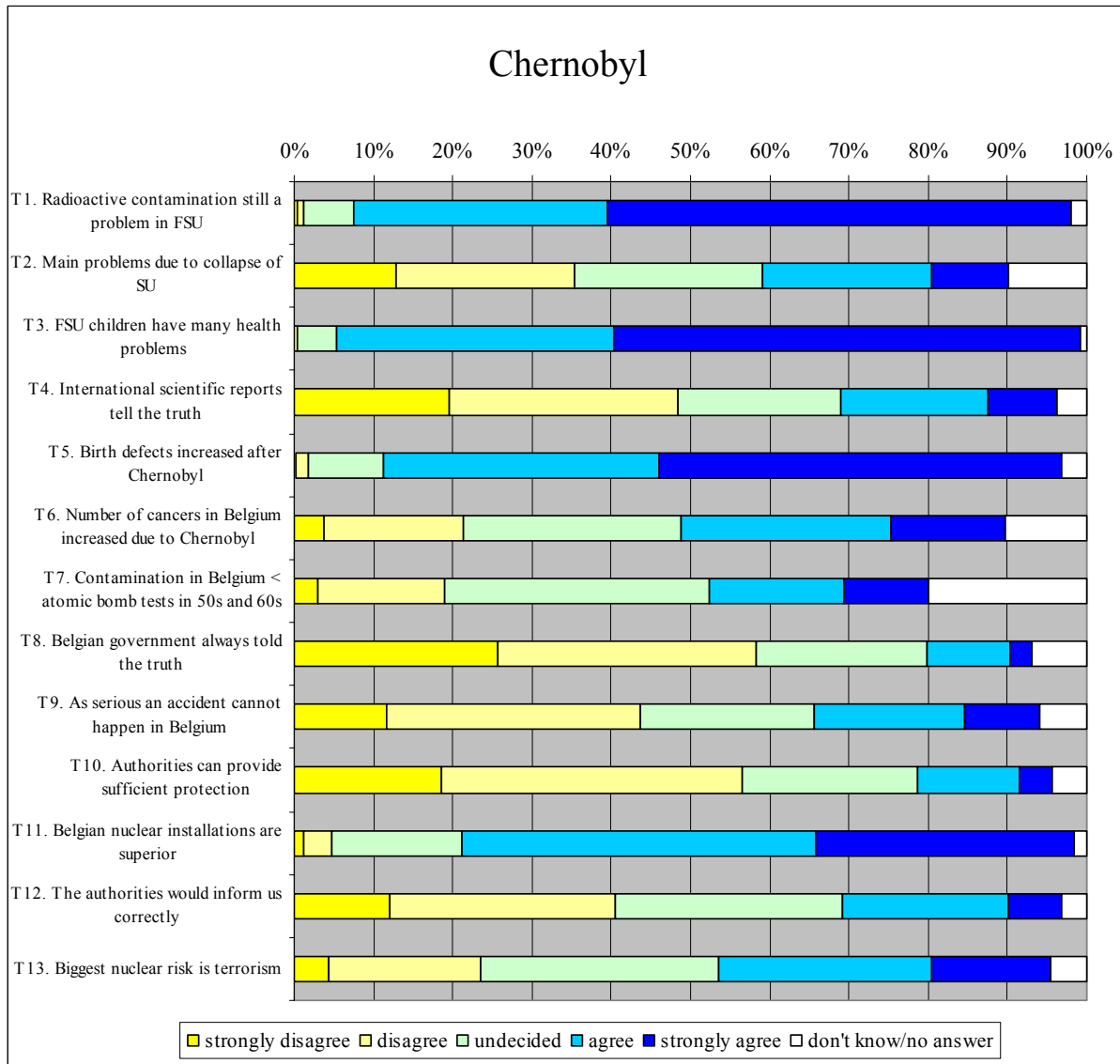


Fig. 17 Opinions on Chernobyl related issues

Results show that an overwhelming majority of about 90% of the respondents believe that there are still problems with the radioactive contamination in the former SU, that children from affected regions suffer from health problems and that there were more birth defects after the accident. 40 % of the Belgians also believe that the number of cancers in Belgium increased due to the contamination caused by the Chernobyl accident (vs 20% disagrees).

Nearly 50% disagrees with the statement that the international scientific reports tell the truth (vs 27% agrees), and an even larger majority disagrees with the statement "the Belgian authorities have always told the truth during the Chernobyl crisis" (nearly 60% vs 13% agrees).

Almost half (44%) of the respondents thinks an accident as serious as Chernobyl can happen in Belgium (vs 28% thinks it cannot happen), but a large majority (77%) agrees that the Belgian NPP's are technically superior to the ones in the former SU.

### *Cross tabulation Chernobyl*

	Language	Gender	Education	Region	Habitat	Class	Age	Children
T1	$\chi^2=47,70$ p<0,001		$\chi^2=41,27$ p=0,016	$\chi^2=50,00$ p<0,001	$\chi^2=24,78$ p=0,016		$\chi^2=30,03$ p<0,001	$\chi^2=13,56$ p=0,009
T2	$\chi^2=43,82$ p<0,001		$\chi^2=37,20$ p=0,042	$\chi^2=42,42$ p<0,001	$\chi^2=36,38$ p<0,001	$\chi^2=56,71$ p=0,001		
T3	$\chi^2=29,19$ p<0,001			$\chi^2=33,57$ p<0,001	$\chi^2=39,09$ p<0,001		$\chi^2=25,74$ p=0,001	$\chi^2=9,99$ p=0,041
T4	$\chi^2=71,00$ p<0,001			$\chi^2=73,64$ p<0,001	$\chi^2=22,08$ p=0,037			
T5	$\chi^2=18,78$ p=0,001			$\chi^2=21,52$ p=0,006	$\chi^2=47,00$ p<0,001		$\chi^2=17,88$ p=0,022	
T6		$\chi^2=12,86$ p=0,012	$\chi^2=50,07$ p=0,001	$\chi^2=17,68$ p=0,024	$\chi^2=21,83$ p=0,040			
T7	$\chi^2=94,99$ p<0,001	$\chi^2=13,42$ p=0,009		$\chi^2=94,43$ p<0,001			$\chi^2=19,46$ p=0,013	
T8	$\chi^2=54,41$ p<0,001			$\chi^2=53,95$ p<0,001	$\chi^2=46,94$ p<0,001			
T9	$\chi^2=10,48$ p=0,033				$\chi^2=23,91$ p=0,021			
T10	$\chi^2=26,69$ p<0,001		$\chi^2=43,08$ p=0,010	$\chi^2=26,07$ p=0,001	$\chi^2=41,39$ p<0,001	$\chi^2=43,97$ p=0,028		
T11	$\chi^2=21,22$ p<0,001	$\chi^2=16,54$ p=0,002	$\chi^2=37,15$ p=0,042	$\chi^2=28,25$ p<0,001	$\chi^2=23,52$ p=0,024		$\chi^2=34,80$ p<0,001	$\chi^2=21,26$ p<0,001
T12			$\chi^2=41,82$ p=0,014		$\chi^2=32,13$ p=0,001			

T1. French speaking people, older people, people with high education and from high social strata and people without children are more often than their counterparts inclined to believe that there are still problems with radioactive contamination in certain areas of the former Soviet Union.

T2. Dutch speaking people, lower social classes, people with but a basic education and people from rural areas are the most important categories of the population that state that problems of the local population in the affected areas are mainly due to the collapse of the Soviet Union.

T3. French speaking people, people in urban areas and older people think more than their counterparts that children in the affected areas in the former Soviet Union have many health problems. People without children think also more that children are affected than do people without children.

T4. Dutch speaking people and city dwellers state more often than French speakers and inhabitants of rural areas that scientific reports of international organizations tell the truth about the situation in Chernobyl. Flemish people agree more than Brussels people and more than Walloon people on this statement.

T5. French speaking people, older people and people from urban areas think that the number of birth defects has risen sharply after the Chernobyl accident.

T6. Women, people with low education and people from rural areas think that the number of cancers in Belgium has largely increased due to the Chernobyl accident. Flemish and Walloon people agree more on this statement than people from Brussels.

T7. French speaking people, women and older people think more than their counterparts that the radioactive deposition in Belgium due to the Chernobyl accident was far less important than the one from the atomic bomb tests in the 50's and 60's. Walloon people agree most easily, respectively followed by inhabitants of Brussels and the Flemish. The level of 'blank' answers ('don't know' or 'no answer') to this particular question is the highest throughout the survey.

T8. Dutch speaking people and people from urban areas think more than their counterparts that the Belgian authorities have always told the truth during the Chernobyl crisis.

T9. Dutch speaking people and people from rural areas believe more than French speakers and city dwellers that an accident as serious as the Chernobyl one will never happen in Belgium.

T10. Dutch speaking people, people from the lower social strata or urban areas and people with a rather basic education think more than their counterparts that the authorities are able to provide satisfactory protection to the population in case of an accident in a nuclear power plant. Flemish and Brussels people agree more on this statement than Walloon people.

T11. Dutch speaking people, people from urban areas, people with low education, males, older people and people without children express more often than their counterparts that the Belgian nuclear installations are technically far superior to the ones in the former Soviet Union.

T12. People from urban areas, older people and people with low education are the main categories that think that the government would inform them correctly if there were a safety problem in a nuclear installation. Brussels and Flemish people agree more than Walloon people on this statement.

T13. Dutch speakers, people from low social strata or from rural areas state more often than their counterparts that the biggest risk of a nuclear disaster is due to terrorism rather than the operation of a nuclear plant. Flemish people agree proportionally more easily with this statement than Walloon and Brussels people.

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## **9 Appendix: Technical document by ASK**



## Onderzoek naar risicoperceptie

### Technisch dossier

18 april 2006



Veldkant 37 - 2550 Kontich - Belgium  
Phone 32-3-451.00.45 - Fax 32-3-457.57.47  
[www.ASKbmi.com](http://www.ASKbmi.com)  
Dominique Vanmarsenille



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2. Onderzoeksplan	A4
3. Kwaliteitszorg	A46
4. Onderzoeksteam	A51
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## 1. ACHTERGROND EN ONDERZOEKSDOELSTELLINGEN



## 1. ACHTERGROND EN ONDERZOEKSDOELSTELLINGEN

Het studiecentrum voor Kernenergie (SCK.CEN) voert sedert 2002 opinie-onderzoek uit naar risicoperceptie in België.

In 2002 werd een eerste risico-onderzoek uitgevoerd. In 2006 was een tweede editie aan de beurt.

Hierbij ging de aandacht uit naar de perceptie van een aantal risico's bij de bevolking, het vertrouwen in voedselveiligheid en de reacties op een voedselcrisis, de problematiek van de energievoorziening, radioactief afval en de 20<sup>ste</sup> verjaardag van het Tshernobyl incident. Daarenboven wordt het socio-demografisch en psychografisch profiel van de bevolking geschetst.

## 2. ONDERZOEKSPLAN

## 2. ONDERZOEKSPLAN

### 2.1. UNIVERSUM

Het onderzoek richt zich tot de in België residerende bevolking van 18 jaar en ouder.

Deze populatie bestaat uit 8.230.000 individuen en kan perfect beschreven worden op basis van de klassieke socio-demografische en -economische variabelen.

Tabel 1

		UNIVERSUM			
		TOTAAL	VLAANDER EN	BRUSSEL	WALLONIE
Totaal		8,230	4,808	787	2,635
Geslacht	Mannen	3,978	2,349	370	1,259
	Vrouwen	4,252	2,459	417	1,376
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
Leeftijd	18-24	886	505	91	290
	25-34	1,385	773	174	438
	35-44	1,598	945	149	504
	45-54	1,454	851	123	480
	55-64	1,129	678	93	358
	65+	1,778	1,056	157	565
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
	18-34	2,271	1,278	265	728
	35-54	3,052	1,796	272	984
	55+	2,907	1,734	250	923
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
Gezinsgrootte	1 persoon	1,284	625	210	449
	2 personen	2,880	1,741	255	884
	3 personen	1,650	974	124	552
	4 personen +	2,416	1,468	198	750
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
Provincie	West Vlaanderen	913	913		
	Oost Vlaanderen	1,102	1,102		
	Antwerpen	1,333	1,333		
	Limburg	642	642		
	Vlaams Brabant	818	818		
	Brussel 19	787		787	
	Brabant Wallon	278			278
	Hainaut	1,010			1,010
	Namur	352			352
	Luxembourg	193			193
	Liège	802			802
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
	Habitat	New 5 grote	2,383	962	787
New 43 steden		1,832	1,195		637
New kleine localiteiten		1,915	1,325		590
New Landelijk		2,100	1,326		774
<i>SUBTOTAAL</i>		<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
Opleiding OP	Lager of geen	1,332	765	120	447
	Lager secundair - Algemeen	1,631	936	156	539
	Hoger secundair - Algemeen	2,105	1,290	158	657
	Lager secundair - Technisch/Kunst/Beroeps	808	507	57	244
	Hoger secundair - Technisch/Kunst/Beroeps	130	70	7	53
	Hoger - Niet universitair	1,547	897	146	504

Tabel 1

		UNIVERSUM			
		TOTAAL	VLAANDER EN	BRUSSEL	WALLONIE
	Hoger - Universitair	677	343	143	191
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
Beroep OP	landbouwer: minder dan 15 ha	9	8	0	1
	landbouwer : 15 ha of meer	35	25	0	10
	ambachtsman, handelaar, met 5 loontrekkende of minder	289	167	33	89
	industrieel, groothandelaar met 6 loontrekkende of meer	25	18	1	6
	vrij beroep (dokter, advocaat, notaris, ...)	151	86	26	39
	lid van de algemene directie, hoger kader (directeur, bestuurder, ..) verantwoordelijk voor 5 loontrekkende of minder	22	13	4	5
	lid van de algemene directie, hoger kader (directeur, bestuurder, ..) verantwoordelijk voor 6 tot 10 loontrekkende	12	8	2	2
	lid van de algemene directie, hoger kader (directeur, bestuurder, ..) verantwoordelijk voor 11 loontrekkende of meer	48	30	6	12
	middenkader, geen deel uitmakend van de algemene directie, verantwoordelijk voor 5 loontrekkende of minder	248	148	39	61
	middenkader, geen deel uitmakend van de algemene directie, verantwoordelijk voor 6 loontrekkende of meer	166	110	12	44
	andere bedienden, hoofdzakelijk kantoorwerk	745	442	66	237
	andere bedienden, hoofdzakelijk geen kantoorwerk (verpleegster, leerkracht, politie, ..)	1,120	654	87	379
	geschoolde arbeider, opzichter	821	550	33	238
	ongeschoolde arbeider, handenarbeid	403	257	46	100
	invalide	236	127	33	76
	gepensioneerd	2,077	1,248	170	659
	student	474	254	61	159
	huisvrouw	677	382	71	224
	werkloos	611	253	94	264
	rentenier	61	28	3	30
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
	Actief	4,094	2,516	355	1,223
	Niet-actief	4,136	2,292	432	1,412
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
	Zelfstandigen	509	304	60	145
	Bedienden - Hoger kader	82	51	12	19
	Bedienden - Middenkader	414	258	51	105
	Bedienden - Bedienden - Kantoor	745	442	66	237
	Bedienden - Bedienden - Andere	1,120	654	87	379
	Arbeiders - Gekwalificeerd	821	550	33	238
	Arbeiders - Niet-gekwalificeerd	403	257	46	100
	Inactief - Invalide/Gepensioneerd/Rentenier	2,374	1,403	206	765
	Inactief - Student	474	254	61	159
	Inactief - Huisvrouw	677	382	71	224
	Inactief - Werkloos	611	253	94	264
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>
Sociale Klasse	1+2	2,118	1,205	259	654
	3+4	2,131	1,302	138	691
	5+6	2,045	1,219	168	658
	7+8	1,936	1,082	222	632
	<i>SUBTOTAAL</i>	<i>8,230</i>	<i>4,808</i>	<i>787</i>	<i>2,635</i>

## 2.2. STEEKPROEF

De vooropgestelde steekproef bedroeg 1.000 respondenten. De finaal behaalde steekproef omvatte 1.063 respondenten.

Tabel 3

		QUOTA	BEHAALD
Totaal		1.000	1.063
<b>Geslacht</b>	Mannen	483	509
	Vrouwen	517	554
	<i>SUBTOTAAL</i>	<i>1.000</i>	<i>1.063</i>
<b>Leeftijd</b>	18-24	108	135
	25-34	168	162
	35-44	194	188
	45-54	177	205
	55-64	137	199
	65+	216	174
	<i>SUBTOTAAL</i>	<i>1.000</i>	<i>1.063</i>
	18-34	276	297
	35-54	371	393
	55+	353	373
	<i>SUBTOTAAL</i>	<i>1.000</i>	<i>1.063</i>
<b>Gezinsgrootte</b>	1 persoon	156	286
	2 personen	350	323
	3 personen	200	206
	4 personen +	294	248
	<i>SUBTOTAAL</i>	<i>1.000</i>	<i>1.063</i>
<b>Provincie</b>	West Vlaanderen	111	120
	Oost Vlaanderen	134	135
	Antwerpen	162	165
	Limburg	78	83
	Vlaams Brabant	99	107
	Brussel 19	96	103
	Brabant Wallon	34	38
	Hainaut	123	134
	Namur	43	43
	Luxembourg	23	22
	Liège	97	113
	<i>SUBTOTAAL</i>	<i>1.000</i>	<i>1.063</i>
<b>Regio</b>	Vlaanderen	584	610
	Brussel	96	103
	Wallonië	320	350
	<i>SUBTOTAAL</i>	<i>1.000</i>	<i>1.063</i>
<b>Habitat</b>	New 5 grote	290	313
	New 43 steden	223	236
	New kleine localiteiten	233	242
	New Landelijk	255	272
	<i>SUBTOTAAL</i>	<i>1.000</i>	<i>1.063</i>
<b>Opleiding OP</b>	Lager of geen	162	94
	Lager secundair - Algemeen	198	135
	Hoger secundair - Algemeen	256	318
	Lager secundair - Technisch/Kunst/Beroeps	98	83
	Hoger secundair - Technisch/Kunst/Beroeps	16	120
	Hoger - Niet universitair	188	226
	Hoger - Universitair	82	87
	<i>SUBTOTAAL</i>	<i>1.000</i>	<i>1.063</i>

Tabel 3

		QUOTA	BEHAALD
Totaal		1.000	1.063
<b>Beroep OP</b>	landbouwer: minder dan 15 ha	1	1
	landbouwer : 15 ha of meer	4	3
	ambachtsman, handelaar, met 5 loontrekkende of minder	35	79
	industrieel, groothandelaar met 6 loontrekkende of meer	3	2
	vrij beroep (dokter, advocaat, notaris, ...)	18	25
	lid van de algemene directie, hoger kader (directeur, bestuurder, ..) verantwoordelijk voor 5 loontrekkende of minder	3	4
	lid van de algemene directie, hoger kader (directeur, bestuurder, ..) verantwoordelijk voor 6 tot 10 loontrekkende	1	1
	lid van de algemene directie, hoger kader (directeur, bestuurder, ..) verantwoordelijk voor 11 loontrekkende of meer	6	3
	middenkader, geen deel uitmakend van de algemene directie, verantwoordelijk voor 5 loontrekkende of minder	30	10
	middenkader, geen deel uitmakend van de algemene directie, verantwoordelijk voor 6 loontrekkende of meer	20	14
	andere bedienden, hoofdzakelijk kantoorwerk	91	87
	andere bedienden, hoofdzakelijk geen kantoorwerk (verpleegster, leerkracht, politie, ..)	136	154
	geschoolde arbeider, opzichter	100	86
	ongeschoolde arbeider, handenarbeid	49	65
	invalide	29	37
	gepensioneerd	252	196
	student	58	83
	huisvrouw	82	82
	werkloos	74	130
	rentenier	7	1
	<i>SUBTOTAAL</i>	<i>1,000</i>	<i>1.063</i>
	<b>Actief</b>	497	534
	<b>Niet-actief</b>	503	529
	<i>SUBTOTAAL</i>	<i>1,000</i>	<i>1.063</i>
	Zelfstandigen	62	110
	Bedienden - Hoger kader	10	8
	Bedienden - Middenkader	50	24
	Bedienden - Bedienden - Kantoor	91	87
	Bedienden - Bedienden - Andere	136	154
	Arbeiders - Gekwalificeerd	100	86
	Arbeiders - Niet-gekwalificeerd	49	65
	Inactief - Invalide/Gepensioneerd/Rentenier	288	234
	Inactief - Student	58	83
	Inactief - Huisvrouw	82	82
	Inactief - Werkloos	74	130
	<i>SUBTOTAAL</i>	<i>1,000</i>	<i>1.063</i>
<b>Sociale klasse</b>	<b>1+2</b>	257	261
	3+4	259	306
	5+6	248	259
	7+8	235	237
	<i>SUBTOTAAL</i>	<i>1,000</i>	<i>1.063</i>
<b>Jodium regio</b>		200	244

Bij 95% betrouwbaarheid waarborgt deze steekproefgrootte navolgende maximale statistische fout (op basis van een t-test):

Tabel 2 n	geobserveerde frequentie (%)													
	1 of 99	2 of 98	3 of 97	4 of 96	5 of 95	10 of 90	15 of 85	20 of 80	25 of 75	30 of 70	35 of 65	40 of 60	45 of 55	50
50	2.8	3.9	4.7	5.4	6.0	8.3	9.9	11.1	12.0	12.7	13.2	13.6	13.8	13.9
100	2.0	2.7	3.8	3.8	4.3	5.9	7.0	7.8	8.5	9.0	9.3	9.6	9.8	9.8
200	1.4	1.9	2.4	2.7	3.0	4.2	5.0	5.6	6.0	6.4	6.6	6.8	6.9	6.9
300	1.1	1.6	1.9	2.2	2.5	3.4	4.0	4.5	4.9	5.2	5.4	5.5	5.6	5.7
400	1.0	1.4	1.7	1.9	2.1	2.9	3.5	3.9	4.2	4.5	4.7	4.8	4.9	4.9
500	0.8	1.2	1.5	1.7	1.9	2.6	3.1	3.5	3.8	4.0	4.2	4.3	4.4	4.4
600	0.8	1.1	1.4	1.6	1.7	2.4	2.9	3.2	3.5	3.7	3.8	3.9	4.0	4.0
700	0.7	1.0	1.3	1.5	1.6	2.2	2.6	3.0	3.2	3.4	3.5	3.6	3.7	3.7
800	0.7	1.0	1.2	1.4	1.5	2.1	2.5	2.8	3.0	3.2	3.3	3.4	3.4	3.5
900	0.7	0.9	1.1	1.3	1.4	2.0	2.3	2.6	2.8	3.0	3.1	3.2	3.3	3.3
1.000	0.6	0.9	1.1	1.2	1.4	1.9	2.2	2.5	2.7	2.8	3.0	3.0	3.1	3.1

Voor de steekproeftrekking ging ASK als volgt te werk:

1 *Voorafgaande stratifikatie naar provincie en urbanisatiegraad*

In België onderscheidt men:

11 provincie-strata de 10 provincies en Brussel; en

4 urbanisatie-strata grote steden, stedelijke gemeenten, secundaire gemeenten en landelijke gemeenten.

De kruising van beide variabelen levert ons 37 cellen op.

2 *Lukrake trekking van de steekproefgemeenten*

In elkeen van de hierboven gedefinieerde cellen wordt vervolgens een aantal gemeenten aselekt getrokken à rato van minimum of een veelvoud van 5 interviews en dit in functie van het aantal inwoners in de gemeente. Grotere gemeenten krijgen aldus een groter aantal interviews toegewezen.

3 *Quota-steekproeftrekking van de individuen*

Voor elke geselecteerde gemeente worden quota opgelegd inzake geslacht (mannen versus vrouwen), leeftijd (3 categorieën), beroepsactiviteit (ja versus neen) en sociale klasse (met een controle voor de hogere sociale klassen die riskeren ondervertegenwoordigd te worden door een hogere non-response). Deze variabelen werden in een gele kleur aangeduid in tabel 3.

Het aantal invalspunten dat ASK trok voor dit onderzoek bedroeg 58 in Vlaanderen, 12 in Brussel en 39 in Wallonië, i.e. 109 in totaal.

Tijdens het veldwerk wordt de quota-opvulling op dagdagelijkse basis gecontroleerd en wordt bijgestuurd waar nodig.

## 2.3. RESPONDENTEN

Het interview richtte zich tot een lukraak geïdentificeerd persoon in het gezin van 18 jaar en ouder.

Standaard weert ASK respondenten die in de afgelopen 6 maanden deel genomen hebben aan een marktonderzoek, alsook verwanten van de ingeschakelde interviewers.

## 2.4. VRAGENLIJST

De opdrachtgever leverde de finale vragenlijst aan in de betrokken talen.

De gemiddelde interviewduur bedroeg 34.4 minuten.

Hierna volgt de gebruikte vragenlijst. De in het interview getoonde videoclips werden aangeleverd door de opdrachtgever en kunnen aldaar verkregen worden.



## Vragenlijst Barometer 2006

### Deel S. Signaletiek

[niet roteren]

S1	Taal van het interview	1. Nederlands 2. Frans
S2	Geslacht van de respondent	1. man 2. vrouw
S3	Woonplaats van de respondent	Postcode
S4	Geboortjaar	Geboortjaar
S5	Wat is uw hoogste behaalde diploma?	1. lager 2. lager technisch 3. lager middelbaar 4. hoger middelbaar 5. hoger technisch 6. hoger niet-universitair 7. universitair
S6	Oefent u momenteel een bepaalde activiteit uit?	1. ja 2. nee
S7	Wat is uw beroep? Duid in het volgende lijstje het beroep aan dat het best overeenstemt met uw professionele activiteiten.	Klassieke lijst <sup>13</sup>
S8 <i>[als S8=ja, ga direct naar S11]</i>	Zorgt u voor het hoofdbestanddeel van het inkomen?	1. ja 2. nee
S9 <i>[enkel als S8=nee]</i>	Wat is het beroep van de belangrijkste kostwinner in het gezin?	Klassieke lijst
S10 <i>[enkel als S8=nee]</i>	En wat is het hoogst behaalde diploma van de belangrijkste kostwinnaar in het gezin	1. Klassieke lijst
S11	Uit hoeveel personen bestaat het gezin waarmee u dagdagelijks of het grootste deel van uw tijd samenleeft?	1. 1 2. 2 3. 3 4. 4 5. 5 6. 6 7. 7 8. 8 9. 9 10. 10 of meer
S12	Waarvan hoeveel kinderen van 3 jaar oud of jonger?	1. 1 2. 2 3. 3 4. 4 5. 5

<sup>13</sup> Zie bijlage

S13	En hoeveel van 4 tot en met 6 jaar?	1. 1 2. 2 3. 3 4. 4 5. 5
S14	En hoeveel van 7 tot en met 12 jaar?	1. 1 2. 2 3. 3 4. 4 5. 5
S15	En hoeveel van 13 tot en met 18 jaar?	1. 1 2. 2 3. 3 4. 4 5. 5
S16	Leest u regelmatig tijdschriften zoals Natuur en Techniek, Eos, Nature, Scientific American of andere wetenschappelijke magazines?	1. ja 2. nee

#### Deel A. Risico en vertrouwen

Er volgt nu een lijstje met risico's, waarvan het ene al groter is dan het andere. We vragen u om telkens de grootte van het risico voor een doorsnee Belg in te schatten en dit aan te duiden op volgende schaal:

1. Zeer laag
2. Laag
3. Gemiddeld
4. Hoog
5. Zeer hoog
6. Weet niet/geen antwoord

*[Items randomiseren]*

RA1.	Verkeersongevallen
RA2.	Tabaksgebruik
RA3.	Druggebruik
RA4.	Kanker
RA5.	Een grote griep epidemie
RA6.	Milieuvervuiling
RA7.	Radioactief afval
RA8.	Scheikundig afval
RA9.	Een ongeval in een scheikundige installatie
RA10.	Een ongeval in een nucleaire installatie
RA11.	Straling van GSM-toestellen
RA12.	Natuurlijke straling (bv. radon of straling uit de ruimte)
RA13.	Röntgenfoto's in de geneeskunde
RA14.	Schadelijke stoffen in de voeding
RA15.	Restanten van bestrijdingsmiddelen op fruit en groenten

RA16.	Een terroristische aanslag op een kerncentrale
RA17.	Een terroristische aanslag in een drukke winkelstraat
RA18.	Een terroristische aanslag met een biologische of chemische bom
RA19.	Vogelgriepvirussen in kippenvlees

Nu zou ik graag opnieuw deze lijst met risico's voorleggen. Deze keer vragen we u hoe groot uw vertrouwen is in de overheid voor de maatregelen die ze neemt om de bevolking tegen elk van deze risico's te beschermen. U kan weerom van dezelfde schaal gebruik maken.

1. Zeer laag
2. Laag
3. Gemiddeld
4. Hoog
5. Zeer hoog
6. Weet niet/geen antwoord

*[Items randomiseren]*

RB1.	Verkeersongevallen
RB2.	Tabaksgebruik
RB3.	Druggebruik
RB4.	Kanker
RB5.	Een grote griep epidemie
RB6.	Milieuvervuiling
RB7.	Radioactief afval
RB8.	Scheikundig afval
RB9.	Een ongeval in een scheikundige installatie
RB10.	Een ongeval in een nucleaire installatie
RB11.	Straling van GSM-toestellen
RB12.	Natuurlijke straling (bv. radon of straling uit de ruimte)
RB13.	Röntgenfoto's in de geneeskunde
RB14.	Schadelijke stoffen in de voeding
RB15.	Restanten van bestrijdingsmiddelen op fruit en groenten
RB16.	Een terroristische aanslag op een kerncentrale
RB17.	Een terroristische aanslag in een drukke winkelstraat
RB18.	Een terroristische aanslag met een biologische of chemische bom
RB19.	Vogelgriepvirussen in kippenvlees

## Deel B. Voedselveiligheid

Nu zouden we graag overgaan naar de veiligheid van ons voedsel. Eerst zou ik enkele algemene vraagjes willen stellen.

### B.1. Typering consument

B01	Ik gebruik indien mogelijk zelf gekweekte producten (eigen kweek, via vrienden en kennissen, ...)	<ol style="list-style-type: none"> <li>1. Helemaal niet akkoord</li> <li>2. Niet akkoord</li> <li>3. Neutraal</li> <li>4. Eerder akkoord</li> <li>5. Helemaal akkoord</li> <li>6. Weet niet/geen antwoord</li> </ol>
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Kunt u aangeven op volgende schaal hoe belangrijk u volgende elementen vindt als u voeding koopt?

1. Helemaal niet belangrijk
2. Weinig belangrijk
3. Tussenin
4. Belangrijk
5. Heel belangrijk
6. Geen antwoord/weet niet

*[roteren]*

B02	Prijs
B03	Versheid
B04	Kwaliteit
B05	Herkomst
B06	Biologische teelt
B07	Sfeer van de winkel

## B.2. Aanvaarding van wettelijke normen

Ik zou het nu dus graag willen hebben over de veiligheid van ons voedsel. De overheid tracht de voedselveiligheid te verzekeren door grenzen op te leggen aan de hoeveelheid schadelijke stoffen die in een bepaald voedingsproduct aanwezig mogen zijn. Deze maximumgrenzen worden door de overheid vastgelegd in de vorm van wettelijke normen. Een dergelijke wettelijke norm vertelt bijvoorbeeld hoeveel dioxines kippenvlees mag bevatten, of hoeveel bewaarmiddelen er in koekjes mogen zitten.

Ik ga een aantal stellingen voorleggen. Kunt u voor elke stelling aangeven in welke mate u ermee akkoord gaat, waarbij u gebruik maakt van volgende schaal:

1. Helemaal niet akkoord
2. Niet akkoord
3. Neutraal
4. Akkoord
5. Helemaal akkoord
6. Geen antwoord/weet niet

*[randomiseren]*

NO1	De wettelijke normen bieden voldoende bescherming, ook voor kinderen en ouderen
NO2	Een voedingsproduct dat voldoet aan de wettelijke normen, kan veilig geconsumeerd worden
NO3	De wettelijke normen zijn niet strikt genoeg
NO4	De overheid is te slecht georganiseerd om de voedselveiligheid te verzekeren
NO5	Er is voldoende controle op voedselproducten

N06	De voedingsindustrie die de wettelijke normen overtreedt wordt niet streng genoeg gestraft
N07	Wettelijke normen zijn het resultaat van degelijk denkwerk van de overheid
N08	Politieke en economische machtspelletjes bepalen hoe strikt de normen zijn
N09	De wettelijke normen zijn te weinig gebaseerd op wat experts weten

## Deel SO. Sociologische typering

Ik zou tussendoor enkele algemene vragen willen stellen die op uzelf betrekking hebben.

*[randomiseren]*

S01	Hoeveel uur per dag kijkt u televisie?	<ol style="list-style-type: none"> <li>1. Nooit of minder dan een uur</li> <li>2. Ongeveer 1 tot 2 uur</li> <li>3. Ongeveer 2 tot 3 uur</li> <li>4. Ongeveer 3 tot 4 uur</li> <li>5. Meer dan 4 uur</li> </ol>
S02	Bent u actief in het verenigingsleven?	<ol style="list-style-type: none"> <li>1. ja</li> <li>2. nee</li> </ol>
S03	Bent u lid van een milieuorganisatie?	<ol style="list-style-type: none"> <li>1. ja</li> <li>2. nee</li> </ol>
S04	Bent u tevreden met uw gezondheidstoestand?	<ol style="list-style-type: none"> <li>1. helemaal niet tevreden</li> <li>2. eerder niet tevreden</li> <li>3. noch tevreden, noch ontevreden</li> <li>4. eerder tevreden</li> <li>5. erg tevreden</li> <li>6. weet niet/geen antwoord</li> </ol>
S05	Bent u tevreden met uw levensstandaard?	<ol style="list-style-type: none"> <li>1. helemaal niet tevreden</li> <li>2. eerder niet tevreden</li> <li>3. noch tevreden, noch ontevreden</li> <li>4. eerder tevreden</li> <li>5. erg tevreden</li> <li>6. weet niet/geen antwoord</li> </ol>
S06	Bent u tevreden met de sociale contacten met uw familieleden, vrienden en kennissen?	<ol style="list-style-type: none"> <li>1. helemaal niet tevreden</li> <li>2. eerder niet tevreden</li> <li>3. noch tevreden, noch ontevreden</li> <li>4. eerder tevreden</li> <li>5. erg tevreden</li> <li>6. weet niet/geen antwoord</li> </ol>
S07	Bent u tevreden met de buurt waar u woont?	<ol style="list-style-type: none"> <li>1. helemaal niet tevreden</li> <li>2. eerder niet tevreden</li> <li>3. noch tevreden, noch ontevreden</li> <li>4. eerder tevreden</li> <li>5. erg tevreden</li> <li>6. weet niet/geen antwoord</li> </ol>

S08	Hoe groot is uw vertrouwen in uw gemeentebestuur?	<ol style="list-style-type: none"> <li>1. Erg laag</li> <li>2. Laag</li> <li>3. Neutraal</li> <li>4. Hoog</li> <li>5. Zeer hoog</li> <li>6. Weet niet/geen antwoord</li> </ol>
S09	Hoe groot is uw vertrouwen in de politieke partijen?	<ol style="list-style-type: none"> <li>1. Erg laag</li> <li>2. Laag</li> <li>3. Neutraal</li> <li>4. Hoog</li> <li>5. Zeer hoog</li> <li>6. Weet niet/geen antwoord</li> </ol>
S010	Hoe groot is uw vertrouwen in het gerecht?	<ol style="list-style-type: none"> <li>1. Erg laag</li> <li>2. Laag</li> <li>3. Neutraal</li> <li>4. Hoog</li> <li>5. Zeer hoog</li> <li>6. Weet niet/geen antwoord</li> </ol>

### B.3. Opinie omtrent tegenmaatregelen bij een accidentele besmetting

*[enquêteur start clip]*

#### CLIP 1. Nieuwsflash accidentele contaminatie

*[enquêteur stopt clip]*

De overheid beschikt over een aantal beproefde technieken om de besmetting van melk en melkproducten te voorkomen of te beperken. We zouden graag willen weten in welke mate deze acties ook door de bevolking geapprecieerd worden. Stelt u voor dat de wettelijke normen overschreden zijn, dus dat de verse melk radioactiever zou zijn dat door de wet is toegelaten. In welke mate gaat u dan akkoord met de volgende acties? Geef uw mening op de volgende schaal:

2. Helemaal niet akkoord
3. Niet akkoord
4. Neutraal
5. Akkoord
6. Helemaal akkoord
7. Geen antwoord/weet niet

CM1.	De boeren houden de koeien op stal en geven ze onbesmet voer, zodat de melk beneden de wettelijke norm blijft
CM2.	Er worden additieven aan het veevoeder toegevoegd zodat de melk beneden de wettelijke norm blijft
CM3.	De melk wordt verwerkt tot boter of kaas die de wettelijke norm wel respecteren
CM4.	De melkerijen mengen de besmette melk met zuivere melk zodat de besmetting beneden de wettelijke norm blijft
CM5.	Als de besmetting te lang duurt, dan moeten de melkkoeien geslacht en vernietigd worden

CM6.	Alle verse melk boven de wettelijke norm wordt vernietigd, zonder te proberen om producten te maken die wel voldoen aan de wettelijke norm
CM7.	Als de gezondheidsspecialisten zeggen dat het niet gevaarlijk is voor onze gezondheid, dan kunnen producten boven de wettelijke norm gewoon gebruikt worden.

Beeld u nu in dat de radioactieve besmetting van de melk door het ongeluk minder erg is, zodat verwacht wordt dat de melk de wettelijke norm niet overschrijdt. In welke mate gaat u dan akkoord met de tegenmaatregelen van de regering? Gelieve te antwoorden a.d.h.v. volgende schaal, en daarbij dus in het achterhoofd te houden dat de melk en melkproducten wel radioactief besmet zijn, maar nog steeds voldoen aan de wettelijke norm.

1. Helemaal niet akkoord
2. Niet akkoord
3. Neutraal
4. Akkoord
5. Helemaal akkoord
6. Geen antwoord/weet niet

CM8.	Producten beneden de wettelijke norm kunnen gebruikt worden zoals gewoonlijk.
CM9.	De besmetting moet zo laag mogelijk gemaakt worden, zelfs als ze al beneden de wettelijke norm is.
CM10.	De boeren houden hun koeien binnen en ze geven ze onbesmet voer zodat de geproduceerde melk zuiver is.
CM11.	De koeien krijgen voedseladditieven die de besmetting in de melk verder naar beneden halen
CM12.	Als boter en kaas minder besmet zijn dan verse melk, dan is het beter de melk te verwerken.
CM13.	De melkerijen vermengen de besmette melk met zuivere melk om de besmetting verder te verminderen.
CM14.	Zelfs als de melk beneden de wettelijke norm is, moet ze vernietigd worden.

Beschouw nu dezelfde situatie, maar deze keer vanuit het standpunt van een consument.

MILKFILT	Koopt u minstens één maal in de maand melk of melkproducten?	<ol style="list-style-type: none"> <li>1. ja [ga naar CM15]</li> <li>2. nee [ga naar CM20; skip CM15-CM19]</li> </ol>
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[enkel indien MILKFILT = ja] [CM15:] Stel u voor dat u melk of melkproducten wil kopen, en daarbij kunt kiezen tussen plaatselijke melk, of melk die uit het buitenland is ingevoerd.

U kunt telkens een antwoord kiezen uit deze categorieën:

*[antwoordalternatieven roteren]*

1. Ik zou geen melk of melkproducten meer kopen
2. Ik zou nog wel melk of melkproducten kopen, maar het zou afhangen van de prijs
3. Ik zou de plaatselijke producten kopen
4. Ik zou de ingevoerde producten kopen
5. Ik weet het niet/geen antwoord

CM15.	De plaatselijke melk en melkproducten zijn zuiver aangezien de koeien op stal gehouden worden.
CM16.	De plaatselijke melk en melkproducten zijn wel besmet, maar voldoen aan de wettelijke norm.
CM17.	Boter en kaas voldoen aan de wettelijke norm, maar zijn geproduceerd uit melk die de wettelijke norm overschrijdt.
CM18.	Melk en melkproducten zijn beneden de wettelijke norm, maar komen van koeien die voedseladditieven gekregen hebben.
CM19.	Plaatselijke producten zijn boven de norm maar de gezondheidsspecialisten zeggen dat ze niet gevaarlijk zijn.

#### B.4. Opinie over tegenmaatregelen na expert-communicatie

*[enquêteur start clip]*

*[Toewijzing van clip 2 of clip 3 gebeurt volgens toeval aan respectievelijk (N/2~500)respondenten. Vragen en antwoordcategorieën die volgen zijn identiek voor beide clips. Bij de antwoorden moet duidelijk vermeld worden welke clip geselecteerd werd]*

#### CLIP 2 of CLIP3. Expert-communicatie

*[enquêteur stopt clip]*

[CM20 en verder:] Nu u dit interview met een expert gehoord hebt, zouden we graag opnieuw uw mening horen over de acties die de overheid kan nemen. Stelt u opnieuw voor dat de wettelijke normen overschreden zijn, dus dat de melkproducten radioactiever zijn dan door de wet is toegelaten. In welke mate gaat u akkoord met volgende acties?

1. Helemaal niet akkoord
2. Niet akkoord
3. Neutraal
4. Akkoord
5. Helemaal akkoord
6. Geen antwoord/weet niet



CM20.	De boeren houden de koeien op stal en geven ze onbesmet voer, zodat de melk beneden de wettelijke norm blijft
CM21.	De melk wordt verwerkt tot boter of kaas die de wettelijke norm wel respecteren
CM22.	Alle verse melk boven de wettelijke norm wordt vernietigd, zonder te proberen om producten te maken die wel voldoen aan de wettelijke norm
CM23.	Als de gezondheidsspecialisten zeggen dat het niet gevaarlijk is voor onze gezondheid, dan kunnen producten boven de wettelijke norm gewoon gebruikt worden.

Beeld u nu in dat de besmetting van de melk door het ongeluk minder erg is, zodat verwacht wordt dat de melk in overeenstemming is met de wettelijke norm. M.a.w., de besmetting van de melk blijft onder de wettelijke limiet. In welke mate gaat u dan akkoord met de tegenmaatregelen van de regering? U kunt opnieuw antwoorden volgens de gekende schaal:

1. Helemaal niet akkoord
2. Niet akkoord
3. Neutraal
4. Akkoord
5. Helemaal akkoord
6. Geen antwoord/weet niet

CM24.	Producten beneden de wettelijke norm kunnen gebruikt worden zoals gewoonlijk.
CM25.	De besmetting moet zo laag mogelijk gemaakt worden, zelfs als ze al beneden de wettelijke norm is.
CM26.	Zelfs als de melk beneden de wettelijke norm is, moet ze vernietigd worden.

Nu u het nieuws heeft vernomen over de lozing van radioactieve stoffen, en daarna de expert heeft gehoord, zouden we u tenslotte nog eens bondig willen vragen wat u denkt van de wettelijke normen die de veiligheid van ons voedsel moeten waarborgen.

Kunt u voor elke stelling weergeven in welke mate u daarmee akkoord gaat?

1. Helemaal niet akkoord
2. Niet akkoord
3. Neutraal
4. Akkoord
5. Helemaal akkoord
6. Geen antwoord/weet niet

NE1	De wettelijke normen bieden voldoende bescherming, ook voor kinderen en ouderen
NE2	Een voedingsproduct dat voldoet aan de wettelijke normen, kan veilig geconsumeerd worden
NE3	De overheid is te slecht georganiseerd om de voedselveiligheid te verzekeren

NE4	Er is voldoende controle op voedselproducten
NE5	Politieke en economische machtspelletjes bepalen hoe strikt de normen zijn
NE6	De wettelijke normen zijn te weinig gebaseerd op wat experts weten

## Deel P. Persoonlijkheidsprofielen

De volgende schalen bestaan uit beschrijvingen die verwijzen naar verschillen tussen mensen. Aan beide uiteinden van de schaal staat een dergelijke beschrijving neergeschreven.

Geef aan op de onderstaande vijf-puntenschaal naar welke kant de beschrijving voor jezelf overheeft. Denk bij het beoordelen van de schalen hoe jij je het afgelopen jaar meestal hebt gedragen, dus niet hoe je in de toekomst zou willen zijn.

Bijvoorbeeld, indien je je het afgelopen jaar eerder aan de bezorgde kant of zenuwachtig hebt gedragen, vul je een vakje in dat aanleunt bij de linkerkant van de vijf vakjes. Bijvoorbeeld:

PO1	Angstig, zenuwachtig, bezorgd		x				Rustig, kalm, ontspannen
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Als je integendeel uiterst ontspannen en rustig was, vul je het vakje in dat helemaal rechts staat.

PO1	Angstig, zenuwachtig, bezorgd					x	Rustig, kalm, ontspannen
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*[De respondent dient mee te kijken op het scherm, of de items op een afzonderlijke antwoordkaart te beoordelen; de enquêteur leest ze niet voor]*

*[niet roteren]*

PO1	Angstig, zenuwachtig, bezorgd						Rustig, kalm, ontspannen
PO2	Vriendelijk, warm, hartelijk						Koel, afstandelijk, gereserveerd
PO3	Fantasierijk, dromerig						Praktisch, nuchter
PO4	Vertrouwend, lichtgelovig, naïef						Wantrouwig, sceptisch, cynisch
PO5	Bekwaam, efficiënt, competent						Onbekwaam/onhandig, onvoorbereid
PO6	Gelijkmatig, gemakkelijk in de omgang						Irriteerbaar, boos, lichtgeraakt
PO7	Eenzaam, verlegen, vermijd drukte						Gezelschapsmens, sociaal, uitgaand
PO8	Niet-artistiek, ongeïnteresseerd in kunst						Gevoelig voor kunst en schoonheid
PO9	Sluw, geslepen, manipulerend						Oprecht, eerlijk, rechtuit
PO10	Ongeorganiseerd, slordig						Georganiseerd, net, methodisch

PO11	Depressief, verdrietig, pessimistisch						Tevreden, optimistisch
PO12	Assertief, krachtig, dominant						Onderdanig, volgzzaam
PO13	Emotioneel gevoelig, passioneel						Ongevoelig, niet- empathisch
PO14	Mild, gul, attent						Egoïstisch, vrekking, gierig
PO15	Plichtsbewust, nauwgezet						Onbetrouwbaar, onberekenbaar
PO16	Evenwichtig, op mijn gemak bij anderen						Bedeerd, verlegen, timide
PO17	Traag, slaperig, niet- energiek						Actief, energiek, bezig
PO18	Gewoontegebonden, prefereer routine						Vernieuwend, prefereer afwisseling
PO19	Agressief, competitief, koppig						Meegaand, coöperatief, gehoorzaam
PO20	Lui, niet ambitieus, doelloos						Ambitieus, workaholic
PO21	Impulsief, geef toe aan verleiding						Gecontroleerd, beheerst
PO22	Avontuurlijk, houdt van plezier, risicovol						Vermijd opwinding en stimulatie
PO23	Intellectueel nieuwsgierig, open geest						Smalle interesses, verveeld door ideeën
PO24	Bescheiden, nederig, zichzelf wegcijferend						Arrogant, verwaand
PO25	Gedisciplineerd, persistent, sterke wil						Talmend, opgevend, zwak
PO26	Veerkrachtig, gaat goed om met crisis						Kwetsbaar, fragiel, hulpeloos
PO27	Somber, matig, bot						Vrolijk, opgewekt, verblijvend
PO28	Dogmatisch, traditioneel, conservatief						Liberaal, vrijdenkend
PO29	Meedogenloos, nuchter, niet sentimenteel						Meevoelend, menselijk
PO30	Spontaan, onverschillig, onnadenkend						Voorzichtig, nadenkend, bedachtzaam
PO31	Gedreven door eigen verlangens, ongecontroleerde driften						Driften en verlangens bezorgen mij geen last

P032	Sta open voor eigen emoties						Ben ongeïnteresseerd in eigen gevoelens
P033	Groepsleider, zet de lijnen uit						Afkering tav leiding nemen

## Deel C. Energie, radioactief afval en TsjernobyI

We zijn aanbeland bij het laatste luik van deze enquête.

### C.1. Energievoorziening

Ik zou het met u willen hebben over een onderwerp dat ons allemaal aanbelangt, namelijk de energievoorziening in de toekomst. De Belgische overheid heeft beslist dat de Belgische kerncentrales na 40 jaar dienst zullen gesloten worden, dit is tussen 2013 en 2026 . Geef aan in hoever u akkoord gaat met onderstaande uitspraken.

1. Helemaal niet akkoord
2. Niet akkoord
3. Neutraal
4. Akkoord
5. Helemaal akkoord
6. Geen antwoord/weet niet

EN10.	Wind- en zonne-energie zullen niet volstaan om de sluiting van kerncentrales op te vangen.
EN11.	De hoge energieprijzen in de toekomst zullen ons verplichten om zuiniger om te gaan met energie.
EN12.	Ik ben bereid een deel comfort op te geven om energie te besparen (minder met de wagen rijden, of de verwarming lager zetten)
EN13.	Ik ben bereid om serieuze investeringen te doen om energie te besparen (warmwater installaties met zonne-energie, ...)
EN14.	In de toekomst zullen we problemen krijgen om te verzekeren dat er altijd voldoende brandstof en elektriciteit is
EN15.	Kerncentrales open houden zal nodig zijn om minder afhankelijk te zijn van sommige landen.
EN16.	De vermindering van het aantal kerncentrales in Europa is een goede zaak.
EN17.	De kerncentrales zetten de toekomst van onze kinderen onherstelbaar op het spel.
EN18.	Het onderzoek in het nucleaire domein moet voortgezet worden.

## C.2. Radioactief afval

Nu zou ik u enkele stellingen in verband met radioactief afval willen voorleggen. Radioactief afval wordt ingedeeld in verschillende categorieën. Enigszins vereenvoudigd maakt men een onderscheid tussen twee voorname soorten afval. Het zogenaamde hoogactief afval straalt fel, en zal over een zeer lange periode radioactief blijven (duizenden jaren); het laagactief afval straalt veel minder, en wordt ongevaarlijk na ongeveer 300 jaar. Voor het beheer van dit radioactief afval op lange termijn worden nu de verschillende bergingsmogelijkheden uitgewerkt.

Geef aan in hoeverre u akkoord gaat met onderstaande beweringen?

1. Helemaal niet akkoord
2. Niet akkoord
3. Neutraal
4. Akkoord
5. Helemaal akkoord
6. Geen antwoord/weet niet

*[niet roteren]*

WA13.	Men moet een onderscheid maken tussen verschillende soorten radioactief afval naargelang het risico.
WA14.	De berging van het laagactief afval vraagt een andere aanpak dan die van hoogactief afval.
WA15.	Zowel hoog- als laagradioactief afval moet diep onder de grond worden geborgen waar er zeker niemand mee in aanraking kan komen.
WA16.	Laagactief afval mag ook geborgen worden in een veilige bergingsinstallatie aan de oppervlakte in plaats van in de diepe ondergrond.
WA17.	Een bergingsinstallatie van laag radioactief afval is minder gevaarlijk dan een industriële stortplaats voor scheikundig afval.
WA18.	Mits controle kan men de veiligheid van een oppervlakteberging over 300 jaar garanderen.
WA19.	Het is belangrijk dat men het radioactief afval altijd kan terugnemen om nieuwe verwerkingstechnieken toe te passen.
WA20.	Ons land is te dichtbevolkt voor een berging van radioactief afval.
WA21.	Het is niet aanvaardbaar dat men het Belgische radioactief afval uitvoert om het in het buitenland te bergen
WA22.	Het is nodig dat de bevolking van de streek waar men een bergplaats van radioactief afval voorziet vergaande inspraak krijgt in de aanleg ervan.
WA23.	Het is nodig dat een streek waar radioactief afval geborgen wordt, economische compensaties krijgt.
WA24.	Compensaties voor een streek die radioactief afval bergt, moeten betaald worden door alle Belgische elektriciteitsgebruikers

### C.3. Tsjernobyl

De enquête is bijna afgelopen. Ik zou om te eindigen nog enkele vragen willen stellen over Tsjernobyl.

*[antwoordalternatieven roteren]*

T0	Tsjernobyl is bekend omwille van:	<ol style="list-style-type: none"> <li>1. Een zware aanslag door Tsjetsjeense rebellen op een school.</li> <li>2. Een ontploffing van een kerncentrale.</li> <li>3. Een ontploffing van een chemische fabriek.</li> <li>4. Een atoomduikboot die gezonken is.</li> <li>5. Een ernstige aardbeving.</li> <li>6. Weet niet/geen antwoord.</li> </ol>
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*[enquêteur zegt na goed of fout antwoord: Tsjernobyl is een stad in de vroegere Sovjetunie die gekend is omdat er een ontploffing in een kerncentrale plaatsvond.]*

Er volgen nu een aantal stellingen over Tsjernobyl en de gevolgen ervan. Gelieve een laatste maal gebruik te maken van de vertrouwde schaal om uw antwoord te geven:

1. Helemaal niet akkoord
2. Niet akkoord
3. Neutraal
4. Akkoord
5. Helemaal akkoord
6. Geen antwoord/weet niet

T1.	In sommige gebieden van de vroegere Sovjet-Unie zijn er nu nog problemen met de radioactieve besmetting van Tsjernobyl.
T2.	De problemen van de lokale bevolking in de getroffen gebieden zijn vooral aan de ineenstorting van de Sovjet-Unie te wijten
T3.	Kinderen in de getroffen gebieden in de voormalige Sovjet-Unie hebben vele gezondheidsproblemen
T4.	Wetenschappelijke rapporten van internationale organisaties vertellen de waarheid over de toestand in Tsjernobyl
T5.	Het aantal afwijkingen bij geboorten is sterk toegenomen na het ongeval van Tsjernobyl
T6.	Door het ongeval van Tsjernobyl is het aantal kankers achteraf in België sterk verhoogd.
T7.	De radioactieve afzetting van het ongeval van Tsjernobyl in België was veel minder belangrijk dan deze van de atoombomproeven van de jaren '50 en '60
T8.	De Belgische overheid heeft steeds de waarheid verteld tijdens de Tsjernobyl crisis
T9.	Een ongeval dat zo ernstig is als dat van Tsjernobyl zal zich nooit voordoen in België.

T10.	In geval van een ernstig nucleair ongeval is de overheid in staat om de bevolking voldoende te beschermen
T11.	De Belgische kerninstallaties zijn technisch veel beter dan deze in de vroegere Sovjet-Unie
T12.	De overheid zal ons correct informeren als er zich een probleem zou stellen met de veiligheid in een kerncentrale
T13.	Het grootste risico op een kernramp zal te wijten zijn aan terrorisme, en niet aan de uitbating van een kerninstallatie

Heel vriendelijk bedankt voor uw medewerking. U hebt het wetenschappelijk onderzoek een dienst bewezen, en op die manier heeft u ook uw steentje tot een betere samenleving bijgedragen.

## Questionnaire Baromètre 2006

### S. Signalitique [pas de rotation]

S1	Langue de l'interview	1. Néerlandais 2. Français
S2	Sex du répondant	1. homme 2. femme
S3	Résidence du répondant	Code postal
S4	Année de naissance	Année de naissance
S5	Quel est le plus haut diplôme obtenu?	Liste classique <sup>14</sup>
S6	Exercez vous une activité professionnelle pour l'instant?	1. oui 2. non
S7	Quel est votre profession actuelle? Indiquez la profession appropriée dans la liste suivante	Liste classique
S8 [als S8=ja, ga direct naar S11]	Etes vous le principal responsable des revenus dans le ménage?	1. oui 2. non
S9 [enkel als S8=nee]	Quelle est la profession du principal responsable des revenus dans le ménage?	Liste classique
S10 [enkel als S8=nee]	Quel est le diplôme le plus haut obtenu par le principal responsable des revenus dans le ménage ?	Liste classique
S11	Combien de membres y-a-t-il dans votre ménage y compris vous meme? Il s'agit des personnes avec qui vous passez du temps chaque jour ou la plupart du temps .	1. 1 2. 2 3. 3 4. 4 5. 5 6. 6 7. 7 8. 8 9. 9 10. 10 of meer
S12	Combien d'enfants de 3 ans ou moins compte votre ménage?	1. 1 2. 2 3. 3 4. 4 5. 5
S13	Combien d'enfants de 4 à 6 ans (inclus) compte votre ménage?	1. 1 2. 2 3. 3 4. 4 5. 5

<sup>14</sup> Zie bijlage



S14	Combien d'enfants de 7 à 12 ans (inclus) compte votre ménage?	1. 1 2. 2 3. 3 4. 4 5. 5
S15	Combien d'enfants de 13 à 18 ans (inclus) compte votre ménage?	1. 1 2. 2 3. 3 4. 4 5. 5
S16	Lisez-vous régulièrement des revues ou des magazines scientifiques, comme par exemple Science & Vie, Science et Avenir, Ça M'intéresse, La Recherche... ?	1. Oui 2. Non

## A. Risque et confiance

Vous trouverez ci-dessous une liste de risques dont les uns sont plus importants que les autres. Nous vous demandons d'indiquer selon l'échelle suivante l'importance du risque que court le Belge moyen:

1. Très faibles,
2. Faibles,
3. Moyens,
4. Elevés,
5. Très élevés,
6. (Ne sait pas, pas de réponse)

*[randomiser]*

RA1.	Les accidents de la route
RA2.	Le tabagisme
RA3.	La drogue
RA4.	Le cancer
RA5.	Une grande épidémie de grippe
RA6.	La pollution environnementale
RA7.	Les déchets radioactifs
RA8.	Les déchets chimiques
RA9.	Un accident dans une installation chimique
RA10.	Un accident dans une installation nucléaire
RA11.	Les rayonnements des téléphones portables
RA12.	Les rayonnements naturels (cosmiques, radon ou radioactivité provenant du sol)
RA13.	Les radiographies médicales
RA14.	Les produits nocifs dans l'alimentation
RA15.	Les résidus de pesticides sur les fruits et les légumes
RA16.	Un attentat terroriste contre une centrale nucléaire
RA17.	Un attentat terroriste dans une rue commerçante très fréquentée
RA18.	Un attentat terroriste à la bombe biologique ou chimique
RA19.	Le virus de la grippe aviaire dans la viande de poulet

Maintenant, j'aimerais vous soumettre à nouveau cette liste de risques mais cette fois-ci nous vous demandons quelle confiance vous avez dans les mesures que les autorités prennent pour protéger la population contre ces risques? Vous pouvez utiliser à nouveau la même échelle.

1. Très faibles,
2. Faibles,
3. Moyens,
4. Elevés,
5. Très élevés,
6. (Ne sait pas, pas de réponse)

[randomiser]

RB1.	Les accidents de la route
RB2.	Le tabagisme
RB3.	La drogue
RB4.	Le cancer
RB5.	Une grande épidémie de grippe
RB6.	La pollution environnementale
RB7.	Les déchets radioactifs
RB8.	Les déchets chimiques
RB9.	Un accident dans une installation chimique
RB10.	Un accident dans une installation nucléaire
RB11.	Les rayonnements des téléphones portables
RB12.	Les rayonnements naturels (cosmiques, radon ou radioactivité provenant du sol)
RB13.	Les radiographies médicales
RB14.	Les produits nocifs dans l'alimentation
RB15.	Les résidus de pesticides sur les fruits et les légumes
RB16.	Un attentat terroriste contre une centrale nucléaire
RB17.	Un attentat terroriste dans une rue commerçante très fréquentée
RB18.	Un attentat terroriste à la bombe biologique ou chimique
RB19.	Le virus de la grippe aviaire dans la viande de poulet

## B. Sécurité alimentaire

Maintenant nous aimerions passer à la sécurité alimentaire. Je voudrais d'abord vous poser quelques questions générales.

### B.1. Type de consommateur

B01	Je consomme si possible mes propres produits (cultivés par moi-même, des amis ou des connaissances, ...)	<ol style="list-style-type: none"> <li>7. Pas du tout d'accord</li> <li>8. Pas vraiment d'accord</li> <li>9. Plus ou moins d'accord</li> <li>10. Assez d'accord</li> <li>11. Tout à fait</li> <li>12. (Ne sait pas, non réponse)</li> </ol>
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Pouvez-vous indiquer sur l'échelle suivante l'importance des éléments suivants lorsque vous achetez vos aliments?

1. Pas du tout important
2. Peu important
3. Plus ou moins,
4. Important
5. Très important
6. Ne sait pas, pas de réponse

*[rotation]*

B02	Le prix
B03	La fraîcheur
B04	La qualité
B05	La provenance
B06	La culture biologique
B07	L'atmosphère du magasin

## B.2. Acceptation des normes légales

Je voudrais donc maintenant passer à la sûreté alimentaire. Les autorités tentent d'assurer la sécurité alimentaire en mettant des limites quant à la quantité de produits nocifs présents dans un aliment déterminé. Ces limites maximales sont fixées par les autorités et représentent les normes légales. Une telle norme légale impose par exemple les quantités maximales de dioxines dans la viande de poulet ou d'agents conservateurs dans les biscuits.

Je vais vous citer un certain nombre de propositions. Pourriez-vous me donner votre avis pour chacune d'elles selon l'échelle suivante.

1. Pas du tout d'accord
2. Pas vraiment d'accord
3. Plus ou moins d'accord
4. Assez d'accord
5. Tout à fait
6. (Ne sait pas, non réponse)

*[randomiser]*

N01	Les normes légales assurent une protection suffisante, même pour les enfants et les personnes âgées
N02	Les produits alimentaires qui correspondent aux normes légales sont sains à la consommation
N03	Les normes légales ne sont pas suffisamment strictes
N04	Les autorités ne sont pas bien organisées pour assurer la sûreté alimentaire
N05	Il y a suffisamment de contrôle sur les produits alimentaires
N06	Les industries alimentaires qui violent les normes légales ne sont pas punies comme il se doit

N07	Les normes légales sont le résultat d'un solide raisonnement de la part des autorités responsables
N08	Les jeux de pouvoir politique et économique décident de la rigueur des normes
N09	Les normes légales ne sont pas assez basées sur ce que les experts savent

## SO. Type sociologique

Maintenant je voudrais vous poser quelques questions personnelles.

*[randomiser]*

S01	Combien d'heures par jour regardez-vous la télévision?	<ol style="list-style-type: none"> <li>1. Jamais ou moins d'une heure</li> <li>2. Environ 1 à 2 heures</li> <li>3. Environ 2 à 3 heures</li> <li>4. Environ 3 à 4 heures</li> <li>5. Plus de 4 heures</li> </ol>
S02	Etes-vous actif dans le domaine associatif?	<ol style="list-style-type: none"> <li>3. Oui</li> <li>4. Non</li> </ol>
S03	Etes-vous membre d'une organisation environnementale?	<ol style="list-style-type: none"> <li>3. Oui</li> <li>4. Non</li> </ol>
S04	Etes-vous satisfait de votre état de santé?	<ol style="list-style-type: none"> <li>7. Pas du tout satisfait</li> <li>8. Pas satisfait auparavant</li> <li>9. Ni content, ni mécontent</li> <li>10. Satisfait auparavant</li> <li>11. Très satisfait</li> <li>12. Ne sais pas / pas de réponse</li> </ol>
S05	Etes-vous satisfait de votre niveau de vie?	<ol style="list-style-type: none"> <li>1. Pas du tout satisfait</li> <li>2. Pas satisfait auparavant</li> <li>3. Ni content, ni mécontent</li> <li>4. Satisfait auparavant</li> <li>5. Très satisfait</li> <li>6. Ne sais pas / pas de réponse</li> </ol>
S06	Etes-vous satisfait de votre vie sociale avec les membres de votre famille, vos amis et connaissances?	<ol style="list-style-type: none"> <li>1. Pas du tout satisfait</li> <li>2. Pas satisfait auparavant</li> <li>3. Ni content, ni mécontent</li> <li>4. Satisfait auparavant</li> <li>5. Très satisfait</li> <li>6. Ne sais pas / pas de réponse</li> </ol>
S07	Etes-vous satisfait de votre voisinage?	<ol style="list-style-type: none"> <li>1. Pas du tout satisfait</li> <li>2. Pas satisfait auparavant</li> <li>3. Ni content, ni mécontent</li> <li>4. Satisfait auparavant</li> <li>5. Très satisfait</li> <li>6. Ne sais pas / pas de réponse</li> </ol>

SO8	Quelle confiance avez-vous dans la gestion communale?	<ol style="list-style-type: none"> <li>1. Très peu</li> <li>2. Peu</li> <li>3. Neutre</li> <li>4. Elevée</li> <li>5. Très élevée</li> <li>6. Ne sais pas / pas de réponse</li> </ol>
SO9	Quelle confiance avez-vous dans les partis politiques?	<ol style="list-style-type: none"> <li>1. Très peu</li> <li>2. Peu</li> <li>3. Neutre</li> <li>4. Elevée</li> <li>5. Très élevée</li> <li>6. Ne sais pas / pas de réponse</li> </ol>
SO10	Quelle confiance avez-vous dans les tribunaux?	<ol style="list-style-type: none"> <li>1. Très peu</li> <li>2. Peu</li> <li>3. Neutre</li> <li>4. Elevée</li> <li>5. Très élevée</li> <li>6. Ne sais pas / pas de réponse</li> </ol>

### B.3. Opinion concernant les contre-mesures après contamination accidentèle

*[start clip]*

#### CLIP 1. Nieuwsflash

*[stopt clip]*

Les autorités disposent d'un certain nombre de techniques éprouvées pour prévenir ou limiter la contamination du lait et des produits laitiers. Nous aimerions savoir dans quelles mesures ces actions sont appréciées par la population. En imaginant que les normes légales de radioactivité du lait frais soient dépassées, seriez-vous d'accord avec les actions suivantes? Pourriez-vous nous donner votre avis selon l'échelle suivante?

1. Pas du tout d'accord
2. Pas vraiment d'accord
3. Plus ou moins d'accord
4. Assez d'accord
5. Tout à fait
6. (Ne sait pas, non réponse)

CM1.	Les éleveurs gardent les vaches dans les étables et leur donnent une alimentation saine pour réduire la contamination en dessous de la norme légale
CM2.	On donne aux vaches des compléments alimentaires pour réduire la contamination du lait en dessous de la norme légale
CM3.	Le lait est transformé en beurre et en fromage, qui eux respectent la norme légale

CM4.	Les laiteries mélangent du lait contaminé avec du lait sain pour réduire la contamination en dessous des normes légales
CM5.	Si cette contamination dure longtemps, on doit organiser l'abattage des vaches et la destruction des produits
CM6.	Tout le lait frais présentant une contamination au-dessus de la norme légale serait éliminé et non consommé, sans même essayer de les transformer en produits qui satisfont bien à la norme légale
CM7.	Si les spécialistes de la santé disent que ce n'est pas dangereux pour notre santé, alors les produits au-dessus de la norme légale peuvent être consommés

Imaginez maintenant que la contamination radioactive du lait due à l'accident soit moins importante, si bien qu'elle ne dépasse pas la norme légale, pourriez-vous nous donner votre avis sur les contre-mesures du gouvernement en utilisant l'échelle suivante, tout en gardant en mémoire que le lait et les produits laitiers sont contaminés mais satisfont encore toujours à la norme légale en matière de radioactivité.

1. Pas du tout d'accord
2. Pas vraiment d'accord
3. Plus ou moins d'accord
4. Assez d'accord
5. Tout à fait
6. (Ne sait pas, non réponse)

CM8.	Les produits en dessous de la norme légale peuvent être consommés normalement
CM9.	La contamination doit être diminuée le plus possible, même si elle est déjà en dessous de la norme légale
CM10.	Les éleveurs gardent les vaches dans les étables et leur donnent une alimentation saine afin qu'elles produisent du lait sain.
CM11.	On donne aux vaches des compléments alimentaires qui permettent de réduire encore la contamination du lait
CM12.	Si le beurre et le fromage sont moins contaminés que le lait frais, il est alors préférable de le transformer.
CM13.	Les laiteries mélangent du lait contaminé avec du lait sain pour réduire encore plus la contamination
CM14.	Même si le lait est en dessous de la norme légale, il doit être éliminé.

Veillez prendre la même situation en considération, mais maintenant nous aimerions savoir ce que vous feriez en tant que consommateur.

MILKFILT	Achetez-vous au moins une fois par mois du lait ou des produits laitiers?	3. Oui [ga naar CM15] 4. Non [ga naar CM20; skip CM15-CM19]
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[enkel indien MILKFILT = ja] Imaginons donc que vous achetez du lait ou des produits laitiers, et que vous avez le choix entre des produits laitiers locaux et des produits importés.

Vous pouvez chaque fois choisir dans les catégories suivantes:

[rotation]

1. J'arrêterais d'acheter du lait ou des produits laitiers
2. Je continuerais à acheter du lait ou des produits laitiers mais cela dépendrait du prix
3. J'achèterais des produits locaux
4. J'achèterais des produits importés
5. Ne sais pas/pas de réponse

CM15.	Le lait local et les produits laitiers locaux sont sains étant donné que les vaches restent dans les étables
CM16.	Le lait local et les produits laitiers locaux sont contaminés mais répondent à la norme légale
CM17.	Le beurre et le fromage satisfont à la norme légale mais proviennent d'un lait au-dessus de la norme légale
CM18.	Le lait et les produits laitiers sont en dessous de la norme légale et proviennent de vaches qui reçoivent des compléments alimentaires
CM19.	Les produits locaux sont au-dessus de la norme légale mais ne sont pas considérés comme dangereux par les spécialistes

#### B.4. Opinion concernant les contre-mesures après communication expert

[start clip]

[aléatoirement clip 2 et clip 3]

CLIP 2 of CLIP3.

[stopt clip]

[CM20 +:] Maintenant que vous avez entendu l'interview d'un expert, nous aimerions vous demander à nouveau votre avis sur les mesures que les autorités peuvent prendre. Imaginez donc à nouveau que les normes légales soient dépassées et que la radioactivité des produits laitiers dépasse celle autorisée par la loi. Dans quelles mesures êtes-vous d'accord avec les actions suivantes?:

1. Pas du tout d'accord
2. Pas vraiment d'accord
3. Plus ou moins d'accord
4. Assez d'accord
5. Tout à fait
6. (Ne sait pas, non réponse)

CM20.	Les éleveurs gardent les vaches dans les étables et leur donnent une alimentation saine pour réduire la contamination en dessous de la norme légale
CM21.	Le lait est transformé en beurre et en fromage, qui eux respectent la norme légale
CM22.	Tout le lait frais présentant une contamination au-dessus de la norme légale serait éliminé et non consommé, sans même essayer de les transformer en produits qui satisfont bien à la norme légale
CM23.	Si les spécialistes de la santé disent que ce n'est pas dangereux pour notre santé, alors les produits au-dessus de la norme légale peuvent être consommés

Imaginez maintenant que la contamination radioactive du lait due à l'accident soit moins importante, si bien qu'elle ne dépasse pas la norme légale, pourriez-vous nous donner votre avis sur les contre-mesures du gouvernement en utilisant l'échelle suivante,

1. Pas du tout d'accord
2. Pas vraiment d'accord
3. Plus ou moins d'accord
4. Assez d'accord
5. Tout à fait
6. (Ne sait pas, non réponse)

CM24.	Les produits en dessous de la norme légale peuvent être consommés normalement
CM25.	La contamination doit être diminuée le plus possible, même si elle est déjà en dessous de la norme légale
CM26.	Même si le lait est en dessous de la norme légale, il doit être éliminé.

Nous venons d'être informés par les nouvelles de la perte de matières radioactives. Après avoir entendu l'expert, nous aimerions vous redemander sérieusement votre avis sur les normes légales qui sont censées garantir la sûreté alimentaire.

Pourriez-vous me donner votre avis pour chaque proposition selon l'échelle suivante.

1. Pas du tout d'accord
2. Pas vraiment d'accord
3. Plus ou moins d'accord
4. Assez d'accord
5. Tout à fait
6. (Ne sait pas, non réponse)

NE1	Les normes légales assurent une protection suffisante, même pour les enfants et les personnes âgées
NE2	Les produits alimentaires qui correspondent aux normes légales sont sains à la consommation
NE3	Les autorités ne sont pas bien organisées pour assurer la sûreté alimentaire
NE4	Il y a suffisamment de contrôle sur les produits alimentaires
NE5	Les jeux de pouvoir politique et économique décident de la rigueur des normes
NE6	Les normes légales ne sont pas assez basées sur ce que les experts savent



## P. Profil de personnalité

Les échelles suivantes comportent des descriptions qui reflètent les différences entre les personnes. Aux deux extrémités de l'échelle vous trouverez des description. Pouvez-vous indiquer de quel côté vous vous situez dans les cinq points repris dans l'échelle ci-dessous? Pensez surtout a votre comportement lors de l'année écoulée, éviter de remplir comment vous le souhaiteriez dans le futur. Par exemple, si lors de l'année écoulée, votre comportement était plutôt préoccupé ou nerveux, alors mettez une croix dans la partie gauche des cinq cases.

P01	Anxieux, nerveux, inquiet			X					Tranquille, calme, détendu
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Si par contre vous avez été extrêmement détendu et calme, mettez alors une croix dans la case à l'extrémité droite

P01	Anxieux, nerveux, inquiet	EN	EN	EN	EN	X			Tranquille, calme, détendu	EN23.
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*[Le répondant regarde l'écran ensemble avec l'enquêteur - ne pas lire]  
[pas de rotation]*

P01	Anxieux, nerveux, inquiet								Tranquille, calme, détendu
P02	Amical, chaleureux, affectueux								Froid, distant, réservé
P03	Imaginatif, rêveur								Pratique, prosaïque, terre-à-terre
P04	Confiant, crédule, naïf								Suspicieux, cynique, sceptique
P05	Fiable, efficace, compétent								Incompétent, inefficace
P06	D'humeur égale, facile à vivre								Irritable, colérique, susceptible
P07	Solitaire, timide, évite les foules								Grégaire, sociable, extraverti
P08	Insensible à l'art et à la beauté								Apprécie l'art et la beauté
P09	Astucieux, rusé, manipulateur								Franc, sincère, droit
P010	Désorganisé, négligent								Organisé, ordonné, méthodique
P011	Déprimé, triste, pessimiste								Satisfait, optimiste
P012	Sûr de soi, énergique, dominant								Soumis, docile
P013	Sensible, passionné								Insensible, peu affectif, indifférent
P014	Généreux, obligeant, prévenant								Égoïste, avare, cupide
P015	Conscientieux, scrupuleux								Désinvolte, peu fiable
P016	Posé, détendu								Embarrassé, mal à l'aise, timide
P017	Lent, léthargique, sans énergie								Actif, vigoureux, énergique
P018	Aime les habitudes, les routines								Innovant, préfère la variété
P019	Agressif, compétiteur, têtu								Conciliant, coopérant, docile
P020	Paresseux, sans ambition, sans but								Ambitieux, bourreau de travail

P021	Impulsif, dominé par ses désirs					Se maîtrise, a de la retenue
P022	Aventureux, quête de sensations					Évite stimulation et animation
P023	Curieux, ouvert aux idées					Peu curieux ou intérêts étroits
P024	Modeste, discret, effacé					Arrogant, suffisant, vaniteux
P025	Discipliné, persévérant, volontaire					Vite découragé, peu persévérant, faible
P026	Solide, gère bien les crises					Vulnérable, fragile
P027	Sombre, terne, mesuré					Joyeux, heureux, gai, plein d'entrain
P028	Dogmatique, conservateur					Libéral, libre penseur
P029	Impitoyable, réaliste, insensible					Sympathique, humain
P030	Spontané, peu soucieux, irréfléchi					Prudent, réfléchi, soigneux
P031	Emporté pas mes envies, J'ai du mal à contrôler mes impulsions					Je ne suis pas perturbé par des désirs difficiles à contrôler,
P032	Intéressé et attentif à mes émotions et sentiments					Pas intéressé par mes émotions et sentiments
P033	Un meneur de groupe, leader, décidé.					Je n'aime pas mener les autres, Je ne suis pas un leader

## C. Énergie, déchets radioactifs et Tsjernobyl

Nous arrivons enfin à la dernière partie de cette enquête

### C.1. Approvisionnement énergétique

Je voudrais maintenant en venir à un sujet qui nous concerne tous, c'est-à-dire l'approvisionnement énergétique dans le futur. Les autorités belges ont pris la décision de fermer les centrales nucléaires belges après 40 ans de service et ce, entre 2013 et 2026.

Pourriez-vous nous dire si vous êtes d'accord avec les affirmations suivantes?:

1. Pas du tout d'accord
2. Pas vraiment d'accord
3. Plus ou moins d'accord
4. Assez d'accord
5. Tout à fait
6. (Ne sait pas, non réponse)

EN1.	L'énergie solaire et les éoliennes ne seront pas suffisantes pour compenser la fermeture des centrales nucléaires
EN2.	Les prix élevés de l'énergie dans le futur nous obligeront à la consommer de manière plus économique
EN3.	Je suis prêt à renoncer à une partie de mon confort pour réaliser des économies d'énergie (rouler moins avec la voiture, ou diminuer nettement le chauffage)

EN4.	Je suis prêt à faire de sérieux investissements pour réaliser des économies d'énergie (installations d'eau chauffée à l'énergie solaire,...)
EN5.	A l'avenir nous aurons des problèmes pour assurer une quantité suffisante de carburant et d'électricité
EN6.	Garder les centrales nucléaires ouvertes sera nécessaire pour être moins dépendants de certaines autres pays
EN7.	La diminution du nombre des centrales nucléaires en Europe est une bonne chose
EN8.	Les centrales nucléaires mettent l'avenir de nos enfants irrévocablement en péril
EN9.	La recherche dans le domaine du nucléaire doit être poursuivie

## C.2. Déchets radioactifs

Maintenant j'aimerais vous soumettre quelques propositions relatives aux déchets radioactifs. Leur radioactivité peut être classée en différentes catégories. En simplifiant quelque peu, on peut les séparer entre deux principales sortes de déchets. Les déchets dits hautement actifs dont le rayonnement est intense et la radioactivité de longue durée (des milliers d'année); les déchets faiblement actifs dont le rayonnement est beaucoup moins élevé et qui deviennent sans danger après environ 300 ans. Pour la gestion de ces déchets radioactifs à long terme, on étudie maintenant différentes possibilités de stockage définitif.

Pouvez-vous indiquer si vous êtes d'accord avec les affirmations suivantes?

1. Pas du tout d'accord
2. Pas vraiment d'accord
3. Plus ou moins d'accord
4. Assez d'accord
5. Tout à fait
6. (Ne sait pas, non réponse)

*[pas de rotation]*

WA1.	On doit faire une différence entre les différentes sortes de déchets radioactifs suivant le risque
WA2.	Le stockage définitif des déchets faiblement actifs exige une approche différente de celle des déchets hautement actifs
WA3.	Aussi bien les déchets de faible activité que ceux de haute activité doivent être stockés profondément dans le sol là où personne ne sait y toucher
WA4.	Les déchets faiblement actifs peuvent être stockés dans un endroit de stockage sûr en surface et non profondément dans le sol.
WA5.	Un endroit de stockage de déchets faiblement radioactifs est moins dangereux qu'une décharge industrielle de déchets chimiques
WA6.	Moyennant contrôles on peut garantir la sécurité d'une installation de dépôt à la surface pendant 300 ans.

WA7.	Il est important que l'on puisse toujours récupérer le déchet radioactif pour appliquer de nouvelles techniques de transformation
WA8.	Notre pays est trop peuplé pour un stockage définitif de produits radioactifs
WA9.	Il n'est pas acceptable d'exporter les déchets radioactifs belges pour les stocker à l'étranger
WA10.	Il est nécessaire de faire participer activement la population de la région où l'on envisage un endroit de stockage de déchets radioactifs, à l'installation de celui-ci
WA11.	Il est nécessaire que la région qui accepte un stockage de déchets radioactifs sur son territoire reçoive des compensations économiques
WA12.	Les compensations pour la région qui accepte un stockage de déchets radioactifs sur son territoire doivent provenir de tous les consommateurs belges d'électricité

### C.3.Tsjernobyl

L'enquête est maintenant bientôt terminée. Pour finir, j'aimerais vous poser quelques questions sur Tchernobyl.

*[rotation]*

T0	<p>Tchernobyl est connu pour:</p> <ol style="list-style-type: none"> <li>1. une violente attaque d'une école par les rebelles tchéchènes</li> <li>2. l'explosion d'une centrale nucléaire</li> <li>3. l'explosion d'une usine chimique.</li> <li>4. le naufrage d'un sous-marin atomique</li> <li>5. un sérieux tremblement de terre</li> <li>6. je ne sais pas / pas de réponse</li> </ol>
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L'Enquêteur répète la réponse bonne ou fausse:

Tchernobyl est une ville qui est connue dans l'ancienne Union Soviétique à cause de l'explosion d'une centrale nucléaire

Vous trouverez ci-dessous une série de thèses sur Tchernobyl et ses conséquences. Veuillez utiliser une dernière fois l'échelle de confiance ci-dessous pour votre réponse:

1. Pas du tout d'accord
2. Pas vraiment d'accord
3. Plus ou moins d'accord
4. Assez d'accord
5. Tout à fait
6. (Ne sait pas, non réponse)

T1.	Dans certaines régions de l'ancienne Union Soviétique, des problèmes de contamination radioactive dus à l'accident de Tchernobyl persistent encore aujourd'hui
T2.	Les problèmes principaux de la population locale dans les régions touchées sont surtout dus à l'effondrement de l'Union Soviétique
T3.	Les enfants des régions touchées dans l'ancien Union Soviétique ont beaucoup de problèmes de santé
T4.	Les rapports scientifiques des organisations internationales disent la vérité au sujet de la situation à Tchernobyl
T5.	Le nombre des malformations à la naissance a fortement augmenté après l'accident de Tchernobyl
T6.	Suite à l'accident de Tchernobyl le nombre de cancers a fortement augmenté en Belgique
T7.	Les retombées radioactives de l'accident de Tchernobyl en Belgique étaient bien plus importantes que celles dues aux essais de la bombe atomique dans les années '50 et '60
T8.	Les autorités ont toujours dit la vérité lors de la crise de Tchernobyl en Belgique
T9.	Un accident nucléaire aussi grave que celui de Tchernobyl ne peut jamais se produire en Belgique?
T10.	Si un accident se produisait dans une centrale nucléaire, les autorités seraient capables d'assurer la protection des populations?
T11.	Les installations nucléaires belges sont techniquement supérieures à celles de l'ancien Union Soviétique
T12.	Les autorités nous informeraient correctement si un problème se présentait au niveau de la sécurité d'une centrale nucléaire
T13.	Le plus grand risque de catastrophe nucléaire sera à attribuer au terrorisme et non à l'exploitation d'une centrale nucléaire

Un grand merci pour votre collaboration. Vous avez pu ainsi contribuer à la recherche scientifique et par là même, apporter une pierre à l'édifice d'une meilleure société.

## 2.5. GEGEVENSVERZAMELING

De interviews werden face to face afgenomen worden bij de respondenten thuis na eventuele voorafgaandelijke afspraakname. Hierbij wordt gebruik gemaakt van capitechnologie.

De interviews worden afgenomen in het Nederlands en Frans. De Nederlandstalige equipe stond in voor de interviews bij Vlaamstaligen terwijl Franstalige respondenten ondervraagd werden door Franstalige interviewers.

Voor dit onderzoek werden in totaal 38 Nederlandstalige en 33 Franstalige interviewers ingeschakeld, i.e. 71 in totaal. Het betrof professionele interviewers die dit vak uitoefenen in hoofdberoep als zelfstandigen.

De interviewers werden uitgenodigd worden op een centraal georganiseerde mondelinge briefing, waarin de doelstellingen van het onderzoek, de te hanteren vragenlijst, eventuele specifieke interviewtechnieken en het eventuele toonmateriaal toegelicht zullen worden. De opdrachtgever werd op de briefing vertegenwoordigd door Koen Van Aecken.

Daarnaast bereidde ASK ook nog schriftelijke instructies voor. Wij hernemen de schriftelijk briefing hierna in beide landstalen.

De interviewers konden ook altijd telefonisch terecht bij de field supervisors voor nadere uitleg.

De respondenten kregen een kleine incentive (Subito) ter bedanking voor hun deelname aan het onderzoek.

Tijdens het veldwerk werd de mogelijkheid geboden om de interviews bij te wonen.

De opdrachtgever werd wekelijks op de hoogte gebracht van de vorderingen van het veldwerk.

## Nederlandse versie

### Opdrachtgever:

- Studiecentrum voor kernenergie – Centre d'étude de l'énergie nucléaire
- Het is aangewezen de opdrachtgever niet vrij te geven. U kan steeds verwijzen naar een federale instantie die een onderzoek doen aangaande risico's in de Belgische samenleving.

### Respondent:

- Het onderzoek richt zich tot een willekeurig gekozen persoon in het gezin van 18 jaar en ouder
- Opgelet: quota's respecteren.

### Onderzoek:

- 30-tal minuten
- Gestructureerde vragenlijst – veel itembatterijen
- Voor de itembatterijen is het nuttig dat de respondent naast de interviewer plaatsneemt want de items worden gerandomiseerd en soms worden ook de schalen gerandomiseerd.
- 9 thema's worden behandeld:
  1. Socio-demografisch profiel
  2. Risico waarmee de doorsnee Belg mee af te rekenen kan krijgen en het vertrouwen dat in de maatregelen van de overheid om de bevolking tegen deze risico's te beschermen (verkeersongevallen → vogelgriep)
  3. Voedselveiligheid
    - Wordt aandacht besteed aan bio-voeding?
    - Wat denkt men over de wettelijke normen inzake schadelijke stoffen in voedingsproducten?
  4. Sociologische typering van de respondent
    - TV, verenigingsleven, levensstandaard, vertrouwen in openbaar bestuur, ...
  5. Opinie omtrent tegenmaatregelen bij een accidentele besmetting van melk en melkproducten
    - Nieuwsflash-video die aankondigt dat melk en melkproducten radioactief besmet geraakten (Opgelet! Zorg ervoor dat de respondent goed kan zien en horen)
 

- Ongeval → losing van radioactieve stoffen - gebied van 50km rond het ongeval - op grond en weide
      - Geen gevaar voor de volksgezondheid
      - Kan in melk en vlees terecht komen
      - Normen kunnen soms overschreden worden
      - Meer controle
      - Acties worden ondernomen om besmetting te voorkomen/beperken

      - Is men akkoord met een aantal acties indien de wettelijke normen overschreden zijn?
      - Is met akkoord met een aantal acties indien de wettelijke norm niet overschreden is?
      - Zou men zelf nog melk kopen onder bepaalde voorwaarden?
    - Nieuwe nieuwsflash-video waarin een expert aan het woord komt (opgelet! 2 versies die afwisselend door elkaar gebruikt worden - Opgelet! Zorg ervoor dat de respondent goed kan zien en horen)

#### Beide versies

- Meer controles = snel en nauwkeurig te meten met stalen
- Expert SCK

<ul style="list-style-type: none"> <li>- Radioactieve besmetting blijft onder de norm</li> <li>- Indien norm overschreden wordt → producten worden niet op de markt gebracht</li> <li>- Als je ze toch eet, worden de radioactieve stoffen opgenomen door het lichaam → verhoogt kans op kanker en erfelijke afwijkingen</li> </ul>
<p><b>Versie A</b></p> <ul style="list-style-type: none"> <li>- De dosis is lager dan de natuurlijke dosis die elkeen binnenkrijgt per jaar</li> <li>- Expert zegt: risico is zo laag dat het verbruik geen probleem is</li> </ul>
<p><b>Versie B</b></p> <ul style="list-style-type: none"> <li>- De kans op kanker is laag maar niet nihil</li> <li>- Expert zegt: zou de producten slechts af en toe eten en het verbruik beperken, zeker voor de kinderen</li> </ul>

- Is men akkoord met een aantal acties indien de wettelijke normen overschreden zijn?
- Is met akkoord met een aantal acties indien de wettelijke norm niet overschreden is?
- Mening over de wettelijke normen op zich.

6. Persoonlijkheidsprofiel van de respondent

- Bipolaire 5 puntenschaal: vriendelijk ↔ koel
- Het is wellicht gemakkelijker dat de respondent deze vraag rechtstreeks intikt op het scherm.

7. Energievoorziening

- Meningen naar aanleiding van de gevolgen van de sluiting van de kerncentrales in België tussen 2013 en 2026

8. Radioactief afval

- Meningen aangaande radioactief afval

9. Tsjernobyl

- Dit jaar wordt de 20<sup>ste</sup> verjaardag gevierd van het Tsjernobyl ongeval
- Wat weten de respondenten hierover?
- Wat zijn volgens hen de gevolgen hiervan?

**Timing:**

- Gezien de vragen die gesteld worden over Tsjernobyl, dient het veldwerk afgerond te zijn alvorens hierover in de pers gesproken wordt, nl. voor 10 april 2006.



## Franse versie

### Commanditaire :

- Centre d'étude de l'énergie nucléaire.
- Il est préférable de ne pas dévoiler le nom du commanditaire. Au besoin, vous pouvez évoquer une instance fédérale menant une étude relative aux risques dans la société belge.

### Répondant :

- Cette enquête s'adresse à n'importe quel membre du ménage âgé d'au moins 18 ans.
- Attention : respecter les quotas.

### Enquête :

- Environ 30 minutes.
- Questionnaire structuré – nombreuses batteries d'attributs.
- Pour les batteries d'attributs, il est préférable que le répondant s'installe à côté de l'enquêteur car les attributs seront présentés de manière aléatoire, de même que les échelles parfois.
- 9 thèmes abordés :
  10. Profil sociodémographique
  11. Risque auquel le Belge moyen peut être exposé et confiance envers les mesures entreprises par les pouvoirs publics pour protéger la population contre ces risques (accidents de la circulation → grippe aviaire)
  12. Sécurité alimentaire
    - Le répondant accorde-t-il de l'importance à l'alimentation bio ?
    - Que pense-t-il des normes légales relatives aux substances nocives dans les produits alimentaires ?
  13. Profil sociologique du répondant
    - TV, vie associative, niveau de vie, confiance envers les administrations publiques,...
  14. Opinion concernant les contre-mesures en cas de contamination accidentelle du lait et des produits lactés
    - Flash d'information vidéo annonçant que le lait et les produits lactés ont subi une contamination radioactive (Attention ! Assurez-vous que le répondant puisse bien voir et entendre).

<ul style="list-style-type: none"><li>- Accident → déversement de substances radioactives – zone de 50 km autour de l'accident – sol et prairies.</li><li>- Aucun danger pour la santé publique.</li><li>- Peut se retrouver dans le lait et la viande.</li><li>- Les normes peuvent être dépassées dans certains cas.</li><li>- Davantage de contrôle.</li><li>- Des actions sont entreprises pour éviter/limiter la contamination.</li></ul>
--

      - Le répondant est-il d'accord avec certaines actions en cas de dépassement des normes légales ?
      - Est-il d'accord avec certaines actions si les normes légales ne sont pas dépassées ?
      - Continuerait-il à acheter du lait sous certaines conditions ?
    - Nouveau flash d'information vidéo où un expert prend la parole (attention ! 2 versions utilisées en alternance – Attention ! Assurez-vous que le répondant puisse bien voir et entendre).

#### Les deux versions

- Plus de contrôles = mesure rapide et précise via des échantillons.

- Expert du CEN.
- La contamination radioactive demeure inférieure à la norme.
- Si la norme est dépassée → produits non commercialisés.
- Si vous les consommez malgré tout, les substances radioactives sont absorbées par le corps → accroît les risques de cancer et de malformations congénitales.

**Version A**

- La dose est inférieure à la dose naturelle que chacun absorbe en un an.
- L'expert affirme que le risque est si faible que la consommation ne pose aucun problème.

**Version B**

- Le risque de cancer est faible mais pas nul.
- L'expert déclare qu'il faut limiter la consommation du produit, surtout pour les enfants.

- Le répondant est-il d'accord avec certaines actions en cas de dépassement des normes légales ?
- Le répondant est-il d'accord avec certaines actions si les normes légales ne sont pas dépassées ?
- Opinion sur les normes légales en elles-mêmes.

15. Profil de personnalité du répondant

- Echelle bipolaire à 5 points : amical ↔ froid.
- Il est sans doute plus facile que le participant introduise directement ses réponses à l'écran.

16. Approvisionnement en énergie

- Opinions concernant les conséquences de la fermeture des centrales nucléaires en Belgique entre 2013 et 2026.

17. Déchets radioactifs

- Opinions concernant les déchets radioactifs

18. Tchernobyl

- Cette année, on commémore le 20<sup>ème</sup> anniversaire de la catastrophe de Tchernobyl.
- Que savent les répondants à ce sujet ?
- Quelles en sont les conséquences, d'après eux ?

**Timing :**

- Vu les questions posées sur Tchernobyl, il faut avoir terminé le travail sur site avant d'en parler dans la presse, à savoir pour le 10 avril 2006.

## 2.6. GEGEVENSVERWERKING EN RAPPORTAGE

ASK heeft navolgende output geleverd aan de opdrachtgever:

- Een spss- en excel-bestand
- Onderhavig technisch dossier.

### 3. KWALITEITSZORG

### 3. KWALITEITSZORG

In totaal werden 124 interviews gecontroleerd. De controles gebeurden telefonisch tussen 5 april en 11 april 2006.

Hiervoor werd navolgende vragenlijst gebruikt:

STUDIE : Risicobarometer

ENQUÊTEUR : .....

VRAGENLIJST : .....

---

DRAAI HET NUMMER : .....

- 1: antwoord
- 2: geen antwoord
- 3: bezet
- 4: geen telefoonnummer op de vragenlijst
- 5: bestaat niet
- 6: niet te bereiken
- 7: antwoordapparaat/ langdurige afwezigheid
- 8: antwoordapparaat/ terug te bellen
- 9: fax/ modem
- 10: taalprobleem

---

Goedemiddag mevrouw/ mijnheer, mijn naam is ..... van ASK. Zou ik met .....(zie naam van de O.P. op de vragenlijst) kunnen spreken ?

- 1: u spreekt met de goede persoon
- 2: u wordt doorverbonden met deze persoon
- 3: iemand antwoordt in de plaats van de OP
- 4: niet beschikbaar- later terugbellen (afspraak)
- 5: niet beschikbaar- later niet terugbellen (geen afspraak)
- 6: de OP is er niet en niemand kan in zijn/ haar naam antwoorden
- 7: taalprobleem
- 8: weigering

In het kader van een kwaliteitscontrole van het werk van onze enquêteurs, zou ik u een paar vragen willen stellen.

Om te beginnen:

1. Herinnert u zich onlangs te hebben deelgenomen aan een enquête ?

- JA → ga naar V2
- NEEN → ga naar V2 « NEEN » (noem de onderwerpen opnieuw)

2. Herinnert u zich waarover die enquête ging?

- JA → Herinnert u zich nog waar de enquête over ging? Welke onderwerpen?  
.....
- NEEN → Herinnert u zich deelgenomen te hebben aan een studie over kernenergie?
  - JA → ga naar V3
  - NEEN → check de coördinaten van de OP (naam, adres, tel) → STOP  
Coördinaten OK  
Foute coördinaten, de juiste zijn:  
.....

3. Werden er vragen gesteld over risico's en vertrouwen ?

- JA → ga naar V4
- NEEN → ga naar v4

4. Werden er vragen gesteld over voedselveiligheid?

- JA → ga naar V5
- NEEN → ga naar V5

5. Werden er vragengesteld over energie, radio actiefafval en Tjsernobyl

- JA → ga naar V6
- NEEN → ga naar V6

6. Hoe werd u ondervraagd ?

- 1: op papier
- 2: op computer
- 3: per telefoon
- 4: u heeft de vragenlijst zelf ingevuld
- 5 : andere :.....

7. Hoelang heeft die enquête ongeveer geduurd? In minuten uitgedrukt

..... minuten

8. Hoe oud bent u?

.....jaar

10. Heeft de enquêteur u kaarten, foto's of ander toonmateriaal laten zien ?

- JA
- NEEN

11a. Heeft u in de loop van de 4 laatste maanden vaker meegedaan aan een enquête?

- JA → ga naar V 11 B
- NEEN → ga naar EINDE

11b. Aan hoeveel enquêtes heeft u deelgenomen tijdens de laatste 4 maanden (met uitzondering van de enquête waarover we het nu hebben)?

.....enquêtes

EINDE : Dank u voor uw medewerking en nog een prettige avond verder!

---

Hierna volgt het resultaat van de controles:

Studie	Risicobarometer
Job #	9401
Totale steekproef	1.065
% controlenorm	10%
n-controlenorm	107
n-gecontroleerd	124
% gecontroleerd	12%

Legende	
Q	Quota
T	Tijd
M	Materiaal
U	Supplement
Z	Methode
S	Signalitiek
P	Deelname
F	Filter
PP	# maal

Interviewer	# gedaan	# te controleren	# gecontroleerd	OK	Niet OK	Onbeslist	ACTIE
1	6	1	1	1	0	0	
2	5	1	1	1	0	0	
124	5	1	1	1	0	0	
142	21	2	3	3	0	0	
550	10	1	1	1	0	0	
3041	10	1	1	1	0	0	
6665	12	1	1	1	0	0	
7042	12	1	2	2	0	0	
7665	13	1	1	1	0	0	
8519	7	1	1	1	0	0	
8665	14	1	1	1	0	0	
9249	16	2	3	3	0	0	
10227	15	2	2	2	0	0	
10580	15	2	2	2	0	0	
10754	13	1	2	2	0	0	
10865	20	2	2	2	0	0	
10887	15	2	2	2	0	0	
10911	18	2	2	2	0	0	
10954	30	3	3	3	0	0	
11203	32	3	4	4	0	0	
11612	10	1	1	1	0	0	
11653	15	2	2	2	0	0	
11654	16	2	2	2	0	0	
11680	18	2	2	2	0	0	
11706	15	2	2	2	0	0	
11724	15	2	2	2	0	0	
11808	15	2	2	2	0	0	
11853	10	1	1	1	0	0	
11854	12	1	1	1	0	0	
11858	4	0	0	0	0	0	niemand aan de lijn gehad
11859	10	1	1	1	0	0	
11861	6	1	1	1	0	0	
11912	17	2	2	2	0	0	
11913	2	0	1	1	0	0	
12074	1	0	0	0	0	0	niemand aan de lijn gehad
18776	33	3	4	4	0	0	
20117	14	1	2	2	0	0	
20226	17	2	2	2	0	0	
20299	10	1	1	1	0	0	
20304	10	1	7	6	0	1	persoon deed raar , uit bestand gehaald
20464	3	0	0	0	0	0	niemand aan de lijn gehad
20614	24	2	2	2	0	0	
20634	24	2	2	2	0	0	
20734	20	2	2	2	0	0	

Interviewer	# gedaan	# te controleren	# gecontroleerd	OK	Niet OK	Onbeslist	ACTIE
20752	30	3	3	3	0	0	
20776	12	1	1	1	0	0	
20790	19	2	2	2	0	0	
20814	40	4	6	6	0	0	
20832	12	1	1	1	0	0	
20860	7	1	1	1	0	0	
20876	17	2	2	2	0	0	
20879	22	2	2	2	0	0	
20882	13	1	1	1	0	0	
20884	21	2	2	2	0	0	
20889	28	3	3	3	0	0	
20902	10	1	1	1	0	0	
20934	20	2	2	2	0	0	
20957	6	1	1	1	0	0	
20972	12	1	1	1	0	0	
20975	18	2	2	2	0	0	
20989	16	2	2	2	0	0	
20994	13	1	1	1	0	0	
21005	1	0	0	0	0	0	niemand aan de lijn gehad
21009	12	1	1	1	0	0	
21017	20	2	2	2	0	0	
21019	11	1	1	1	0	0	
21418	12	1	1	1	0	0	
30752	44	4	4	4	0	0	
50665	14	1	1	1	0	0	
51665	11	1	1	1	0	0	
60502	14	1	1	1	0	0	
TOTAAL	1065	108	124	123	0	1	

1 interview werd aldus uit het finale bestand gelicht op basis van de controles. Een ander interview, bij een respondent geboren in 1990, werd eveneens uit het bestand gelicht omdat wij niet zeker waren of de respondent wel degelijk volwassen was.



#### 4. ONDERZOEKSTEAM

#### 4. SAMENWERKING MET ASK

Voor dit project werd navolgend onderzoeksteam samengesteld:

- Dominique Vanmarsenille Director bij ASK en econoom van opleiding. Dominique was het aanspreekpunt inzake opzet van het onderzoek.
- Dirk Wouters Research Manager bij ASK en econoom van opleiding. Dirk stond in voor de dagdagelijkse begeleiding van het project.
- Jan Godts EDP-Manager bij ASK. Jan stond in voor de controle van de bestanden en het opmaken van het te leveren bestand.
- Els Michiels EMRQS-verantwoordelijke bij ASK die instond voor de kwaliteitscontrole.
- Nico Bogaerts Field Director bij ID (onze face to face veldwerkpartner) die instond voor de supervisie van de gegevensverzameling, bijgestaan door
- Ives Van Dorselaar Field Manager bij ID die instond voor de dagdagelijkse begeleiding van de interviewers

## 5. UITVOERINGSTERMIJNEN

## 5. UITVOERINGSTERMIJNEN

Onderhavig project werd binnen navolgende tijdspanne afgewerkt:

- Bestelling 07/03/2006
- Briefing 20/03/2006
- Start van het veldwerk 21/03/2006
- Levering van tussentijds 03/04/2006  
bestand
- Einde van het veldwerk 10/04/2006
- Levering van 13/04/2006  
gegevensbestand

## 6. BIJHOUDEN VAN INFORMATIE

## 6. BIJHOUDEN VAN INFORMATIE

ASK zal alle documenten (onderzoeksdossier, vragenlijsten, ingevulde vragenlijsten, briefing instructies, steekproefinformatie, gedurende 1 jaar bewaren te rekenen vanaf de levering van de resultaten.

De gegevensbestanden met onderzoeksresultaten die voor onderhavig onderzoek opgebouwd werden, worden gedurende een periode van 2 jaar door ASK bewaard. Na deze periode heeft ASK het recht om ze te vernietigen.

## 7. VERTROUWELIJKHEID

## 7. VERTROUWELIJKHEID

ASK engageert zich om de briefing- en onderzoeksgegevens vertrouwelijk te behandelen en niet door te geven aan derden zonder uitdrukkelijke toestemming van opdrachtgever.

De opdrachtgever engageert zich om onderhavig onderzoeksvoorstel vertrouwelijk te behandelen en niet aan derden door te geven zonder uitdrukkelijke toestemming van ASK.

ASK draagt er zorg voor dat geen enkele vragenlijst waarin een respondent zou kunnen geïdentificeerd worden, alsook geen enkel ander registratiedocument dat de naam van een respondent vermeldt, aan de opdrachtgever of aan een derde doorgegeven wordt, behalve als een uitdrukkelijk geschreven toestemming werd verkregen van de respondent en uitsluitend voor onderhavige onderzoeksdoelstellingen.

ASK zorgt ervoor dat geen enkel document dat identificeerbare persoonlijke gegevens van de respondenten bevat langer wordt bewaard dan nodig voor de controle van het veldwerk en daarmee samenhangende proefnemingen voor kwaliteitscontrole en het eventueel opnieuw afnemen van bepaalde interviews.



## 8. BIJLAGE: KLASSIEKE PROFIELVRAGEN



Veldkant 37  
2550 Kontich  
Tel: 03-451.00.45  
Fax: 03-457.57.47  
e-mail: info@askbmi.com

# BtoC PROFIEL

INTERVIEWNUMMER	2					
-----------------	---	--	--	--	--	--

ENQUÊTEURNUMMER						(INVULLEN A.U.B.)	BUREAU	
-----------------	--	--	--	--	--	-------------------	--------	--

*De behandeling van uw persoonlijke gegevens door ons bedrijf in het kader van wetenschappelijk onderzoek, wordt geregeld door de wet op de privacy van 8/12/1992. Deze wet staat de raadpleging van het openbaar register toe. U hebt vrije toegang tot deze gegevens en u kunt eventueel vragen om ze aan te passen. Tijdens elke informatieoverdracht aan een derde worden deze gegevens anoniem doorgegeven.*

(MEISJES)NAAM							
VOORNAAM							
ADRES				NR		BUS	
POSTCODE				GEMEENTE			
TELEFOONNUMMER				/			
	Zonummer		Nummer				
BUREAU	SOC. KLASSE	PROVINCIE	VERSTED	IN)ACTIEVEN	POSTCODE		

## 1. CODEER GESLACHT VAN DE RESPONDENT

- 1  MAN                      2  VROUW

## 2. WAT IS UW LEEFTIJD A.U.B.? (NOTEER EN CODEER A.U.B.)

[ ] jaar oud	15-17	18-24	25-34	35-44	45-54	55-64	65+
	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>

## 3. WAT IS UW BURGERLIJKE STAAT ?

- 1  Getrouwd, samenwonend                      2  Weduwe(naar), gescheiden, uit elkaar                      3  Vrijgezel

## 4. BENT U ... ?

- |   |                          |                          |
|---|--------------------------|--------------------------|
|   | JA                       | NEEN                     |
| (1) Voornaamste verantwoordelijke voor het gezinsinkomen        | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Voornaamste verantwoordelijke voor de aankopen in het gezin | <input type="checkbox"/> | <input type="checkbox"/> |

## 5. HOEVEEL LEDEN TELT UW GEZIN, UZELF INBEGREPEN ?

- 1     2     3     4     5     6     7     8     9     10+

### 6. TELT UW GEZIN KINDEREN VAN ... ?

- (1) Minder dan 12 jaar  JA  NEEN  
(2) 12 tot 14 jaar  JA  NEEN

- (3) 15 tot 17 jaar  JA  NEEN  
(4) 18 jaar en ouder  JA  NEEN

### 7. WAT IS UW MOEDERTAAL ?

1  NEDERLANDS

2  FRANS

3  ANDERE

### 8. WAT IS HET HUIDIGE BEROEP ?

ENQ. : *BESCHRIJF IN DETAIL EN CODEER - INDIEN O.P. = V.V.I., HERHAAL DAN DE CODE VAN DE O.P. IN DE KOLOM V.V.I.*

VOORN. VERANT. GEZINSINKOMEN		O.P.	VOORN. VERANT. GEZINSINKOMEN
EN24	EN25. <u>ZELFSTANDIGEN</u>		
	landbouwer: minder dan 15 ha	1	<input type="checkbox"/>
	landbouwer : 15 ha of meer	2	<input type="checkbox"/>
	ambachtsman, handelaar, met 5 loontrekkende of minder (= kleine zelfstandige)	3	<input type="checkbox"/>
-----			
	industrieel, groothandelaar met 6 loontrekkende of meer	4	<input type="checkbox"/>
	vrij beroep (dokter, advocaat, notaris, ...)	5	<input type="checkbox"/>
EN26. EN27.	<u>BEDIENDEN</u>		
	lid van de algemene directie, hoger kader (directeur, bestuurder, ..) verantwoordelijk voor 5 loontrekkende of minder	6	<input type="checkbox"/>
	lid van de algemene directie, hoger kader (directeur, bestuurder, ..) verantwoordelijk voor 6 tot 10 loontrekkende	7	<input type="checkbox"/>
	lid van de algemene directie, hoger kader (directeur, bestuurder, ..) verantwoordelijk voor 11 loontrekkende of meer	8	<input type="checkbox"/>
-----			
	middenkader, geen deel uitmakend van de algemene directie, verantwoordelijk voor 5 loontrekkende of minder	9	<input type="checkbox"/>
	middenkader, geen deel uitmakend van de algemene directie, verantwoordelijk voor 6 loontrekkende of meer	10	<input type="checkbox"/>
	andere bedienden, hoofdzakelijk kantoorwerk	11	<input type="checkbox"/>
	andere bedienden, hoofdzakelijk geen kantoorwerk (verpleegster, leerkracht, politie, ..)	12	<input type="checkbox"/>
EN28. EN29.	<u>ARBEIDERS</u>		
	geschoolde arbeider, opzichter	13	<input type="checkbox"/>
	ongeschoolde arbeider, handenarbeid	14	<input type="checkbox"/>
EN30. EN31.	<u>INACTIEVEN</u>		
	invaliden	15	<input type="checkbox"/>
	gepensioneerd ( <i>CODEER OOK HET LAATST UITGEOEFEND BEROEP</i> )	16	<input type="checkbox"/>
	student	17	<input type="checkbox"/>
-----			
	huisvrouw	18	<input type="checkbox"/>
	werkloos ( <i>CODEER OOK HET LAATST UITGEOEFEND BEROEP</i> )	19	<input type="checkbox"/>
	rentenier	20	<input type="checkbox"/>

9. WAT IS HET HOOGST BEHAALDE DIPLOMA ?

			O.P.	VOORN. VERANT. GEZINSINKOMEN	
EN32.	EN33. <u>LAGER</u>		1	<input type="checkbox"/>	<input type="checkbox"/>
	<u>SECUNDAIR</u>	algemeen, technisch of artistiek lager	2	<input type="checkbox"/>	<input type="checkbox"/>
		hoger	3	<input type="checkbox"/>	<input type="checkbox"/>
		-----			
	beroeps	lager	4	<input type="checkbox"/>	<input type="checkbox"/>
	hoger	5	<input type="checkbox"/>	<input type="checkbox"/>	
EN34.	EN35. <u>HOGE</u>	niet universitair	6	<input type="checkbox"/>	<input type="checkbox"/>
	<u>R</u>	universitair	7	<input type="checkbox"/>	<input type="checkbox"/>

10. SOCIALE KLASSE (ZIE SCHEMA)

1     2     3     4     5     6     7     8



6. DANS VOTRE MENAGE Y A-T-IL DES ENFANTS ... ?

(1) de moins de 12 ans	OUI	NON	(3) de 15 à 17 ans	OUI	NON
(2) de 12 à 14 ans	<input type="checkbox"/>	<input type="checkbox"/>	(4) de 18 ans et plus	<input type="checkbox"/>	<input type="checkbox"/>

7. QUELLE EST VOTRE LANGUE MATERNELLE ?

1  NEERLANDAIS      2  FRANCAIS      3  AUTRES

8. QUELLE EST LA PROFESSION ACTUELLE ?

ENQ. : NOTER EN DETAIL ET CODER - SI P.I. = P.R.R., REPETEZ LE CODE LA P.I. DALS LA COLONNE P.R.R.

PRINC. RESP. REVENUS DU MENAGE		P.I.	PRINC. RESP. REVENUS DU MEN.
EN36. EN37. <u>INDEPENDANTS</u>	agriculteur : moins de 15 ha	1	<input type="checkbox"/>
	agriculteur : 15 ha ou plus	2	<input type="checkbox"/>
	artisan, commerçant avec 5 salariés ou moins (= petit indépendant)	3	<input type="checkbox"/>
	industriel, gros commerçant avec 6 salariés ou plus	4	<input type="checkbox"/>
	profession libérale (docteur, avocat, notaire, ...)	5	<input type="checkbox"/>
EN38. EN39. <u>EMPLOYES</u>	membre de la direction générale, cadre supérieur (directeur, administrateur, ..) responsable de 5 salariés ou moins	6	<input type="checkbox"/>
	membre de la direction générale, cadre supérieur (directeur, administrateur, ..) responsable de 6 à 10 salariés	7	<input type="checkbox"/>
	membre de la direction générale, cadre supérieur (directeur, administrateur, ..) responsable de 11 salariés ou plus	8	<input type="checkbox"/>
	cadre moyen ne faisant pas partie de la direction générale, responsable de 5 salariés ou moins	9	<input type="checkbox"/>
	cadre moyen ne faisant pas partie de la direction générale, responsable de 6 salariés ou plus	10	<input type="checkbox"/>
	autres, principalement travail de bureau	11	<input type="checkbox"/>
	autres, principalement pas de travail de bureau (infirmière, instituteur, policier, ..)	12	<input type="checkbox"/>
EN40. EN41. <u>OUVRIERS</u>	ouvrier qualifié, contremaître	13	<input type="checkbox"/>
	ouvrier non qualifié, manœuvre	14	<input type="checkbox"/>
EN42. EN43. <u>INACTIFS</u>	invalide	15	<input type="checkbox"/>
	pensionné/retraité (CODER <u>AUSSI</u> LA DERNIERE PROFESSION EXERCÉE)	16	<input type="checkbox"/>
	étudiant	17	<input type="checkbox"/>
	ménagère	18	<input type="checkbox"/>
	chômeur (CODER <u>AUSSI</u> LA DERNIERE PROFESSION EXERCÉE)	19	<input type="checkbox"/>
	Rentier	20	<input type="checkbox"/>

9. QUEL EST LE PLUS HAUT DEPLOME OBTENU?

			P.I.	PRINC;RESP. REVENUS DU MEN.
EN44.	EN45. <u>PRIMAIRE</u>		1	<input type="checkbox"/>
	<u>E</u>			<input type="checkbox"/>
	<u>SECONDAIRE</u>	général, technique ou artistique inférieur	2	<input type="checkbox"/>
		supérieur	3	<input type="checkbox"/>
		professionnel	4	<input type="checkbox"/>
		supérieur	5	<input type="checkbox"/>
EN46.	EN47. <u>SUPERIEUR</u>	non universitaire	6	<input type="checkbox"/>
		universitaire	7	<input type="checkbox"/>
				<input type="checkbox"/>

10. CLASSE SOCIALE (VOIR GRILLE)

1     2     3     4     5     6     7     8

**SOCIALE KLASSE op basis van de activiteit van de voornaamste verantwoordelijke van het gezinsinkomen**

Beroep van de V.V.I.	Onderwijsniveau van de V.V.I.													
	1		2		3		4		5		6		7	
	Lager onderwijs		Secundair algemeen technisch LAGER		Secundair algemeen technisch HOGER		Secundair beroeps LAGER		Secundair beroeps HOGER		Hoger niet- universitair		Universitair	
<b>A. ZELFSTANDIGEN</b>														
- Kleine landbouwer	1	7 8	6 7		5 6		6 7		5 6		3 5		3 5	
- Grote landbouwer	2	7 8	6 7		5 6		6 7		4 5		3 4		2 4	
- Ambachtsman, handelaar (- 5 werknemers)	3	7 7	5 6		3 5		5 6		3 4		1 3		1 2	
- Ambachtsman, handelaar (6+ werknemers)	4	6 7	5 6		3 4		5 6		2 3		1 2		1 2	
-Vrije beroepen	5	6 7	5 6		2 4		5 6		2 3		1 2		1 2	
<b>B. BEDIENDEN</b>														
- Hoger kader (5- werknemers)	6	7 7	5 6		3 5		5 6		2 4		1 3		1 2	
- Hoger kader (6 - 10 werknemers)	7	6 7	5 6		3 4		5 6		2 3		1 2		1 2	
- Hoger kader (11+ werknemers)	8	6 7	5 6		2 4		5 6		2 3		1 2		1 2	
- Middenkader (5- werknemers)	9	7 7	5 6		3 5		5 6		3 4		1 3		1 3	
- Middenkader (6+ werknemers)	10	7 7	5 6		3 5		5 6		3 4		1 3		1 3	
- Andere kantoorwerk	11	7 7	6 6		4 5		6 6		3 5		2 3		2 3	
- Andere geen kantoorwerk	12	7 7	6 6		4 5		6 6		3 5		2 3		2 3	
<b>C. ARBEIDERS</b>														
- Geschoolde arbeiders	13	7 8	6 7		5 6		6 7		4 5		3 4		2 4	
- Ongeschoolde arbeiders	14	8 8	7 7		6 7		7 7		6 6		5 6		5 6	
<b>D. INAKTIEVEN</b>														
- Student / invalide	15	17 8 8	8 8		7 8		8 8		7 7		6 7		6 7	
- Huisvrouw	18	8 8	8 8		7 8		8 8		7 7		6 7		6 7	
- Rentenier	20	7 8	6 7		5 6		6 7		4 5		3 4		2 4	

De codes die tussen haakjes staan, dienen gebruikt te worden indien de V.V.I gepensioneerd of werkloos is (inactief),