



AgriFoodResults

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Final guide of good practice for communication towards consumers

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More information on the project can be found at <http://www.agrifoodresults.eu>.



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Executive Summary

Several surveys show that the engagement of consumers to the topic of science is very difficult. Although, the reputation of scientists especially the ones working in independent laboratories or in the government increased in the last 5 years.

Therefore the guide gives only an overview on the aspects which have to be considered if researchers want to spread their findings among the general public. It highlights the particularities of the communication of food science towards consumers. The challenges for scientists are explained which rely on a good relationship and trust between researchers and consumers. Finally recommendations are given how to structure the communication process and to prepare a communication plan.



1. Introduction

Science and technology are an important part of our lives; just take the development of mobile phones and MP3 players. The application of science is inseparable from society. However, nowadays, research is only seen to be relevant when it solves problems and addresses people’s lives. Often scientists are acknowledged as people who deal with issues that are not useful and needless for society.

The large number of scientific studies and the development of technologies have an inevitable impact on society, the structure of its economy and way of living, but the presentation of the EU Communication Unit in 2008 [1] showed that over 60% in the EU agreed that scientists may be dangerous:

“Because of their knowledge, scientists have a power that makes them dangerous” [1]

Over 85% agreed also that scientists ought to communicate their scientific knowledge better. On the other hand, some of these studies are completely incomprehensible for the majority of consumers due to a lack scientific knowledge. Therefore science needs to take into account people’s attitudes and understanding of scientists and their work: How much does the public understands about science? Do people think researchers are trustworthy and communicate well? Is science addressing the issues people care about – and what are those issues?

A special Eurobarometer on Science and Technology carried out in 2010 [2] highlights the challenges scientists face when communicating with the general public:

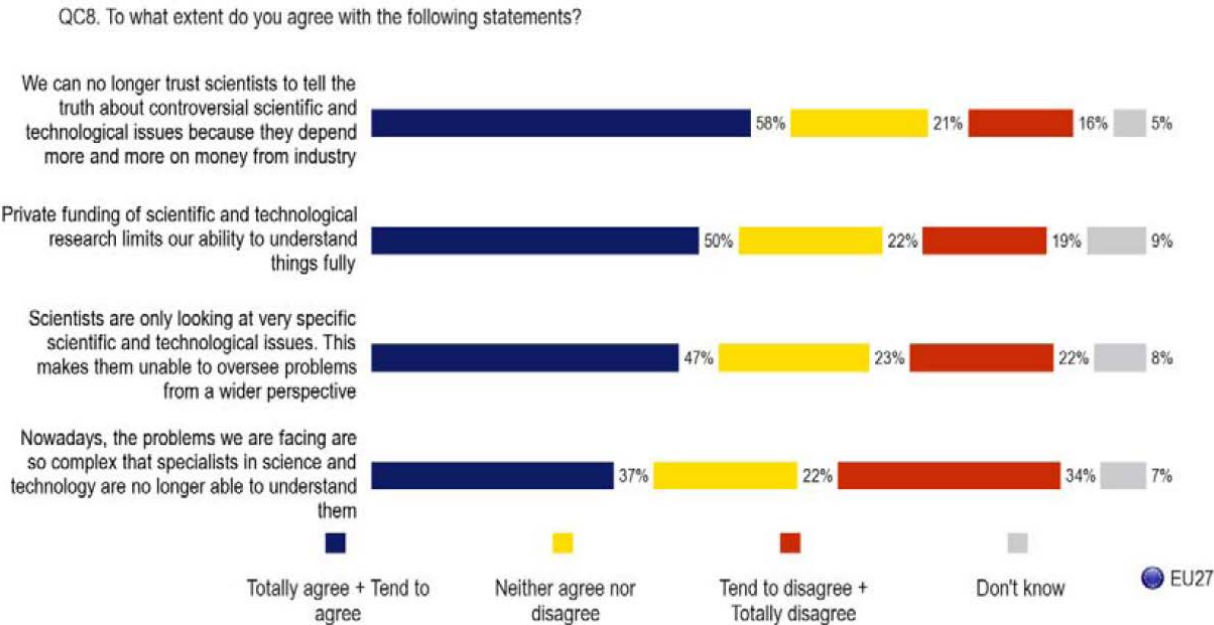


Figure 1: Agreement of EU consumers to statements [2]



There are also cultural and social issues linked to science. Communicating research results to consumers is a complicated issue to tackle. This audience constitutes of a highly diversified group, in which subgroups differ from each other in culture, religion, status, age, sex, countries of residence and economical resources, among other things.

Besides these differences, the interest and concerns about food safety, nutrition and health issues have increased within the last years and there is an increasing demand for this information from consumers. This fact has constituted the basis for expanding their knowledge and helping them make informed choices, thereby supporting public health.

Additionally communication of research results can lead to an enhanced reputation of the scientific team, the value of the research in combination with more budgets, the creation of market demand for the application of these results or new products developed within a project.

So bridging the gap between scientists and citizens is a key issue, if your research is targeted to society relevant issues. Consumers have a direct influence on the growth of the food industry as customers who decide what to purchase. E.g. if salt is bad for their health they may start to look for food products with less salt content. In order, the food industry will be forced to create products with the same level of safety but with less salt.

Another challenge for the food industry is that food crises are not communicated well to the consumers due to the different interests of media. This can lead to mistrust for whole food manufacturing sector. Thus, it is important to establish a good media network and keep consumers well informed.

Consumers may have the feeling that the food industry is using them as a guinea pig because of different scientific opinions. It is important to be precise in communication with consumers and to teach them more about food and the limits of the studies to avoid any misunderstandings. This is why scientists and communicators have to elaborate a strategy to reach citizens and to be able to transmit relevant information. This guide will target how better communicate food research and its results towards consumers.

2. General aspects of the communication towards consumers

When embracing a communication process that involves consumers, you should take into account different factors that influence this communication process. (See Figure 2).



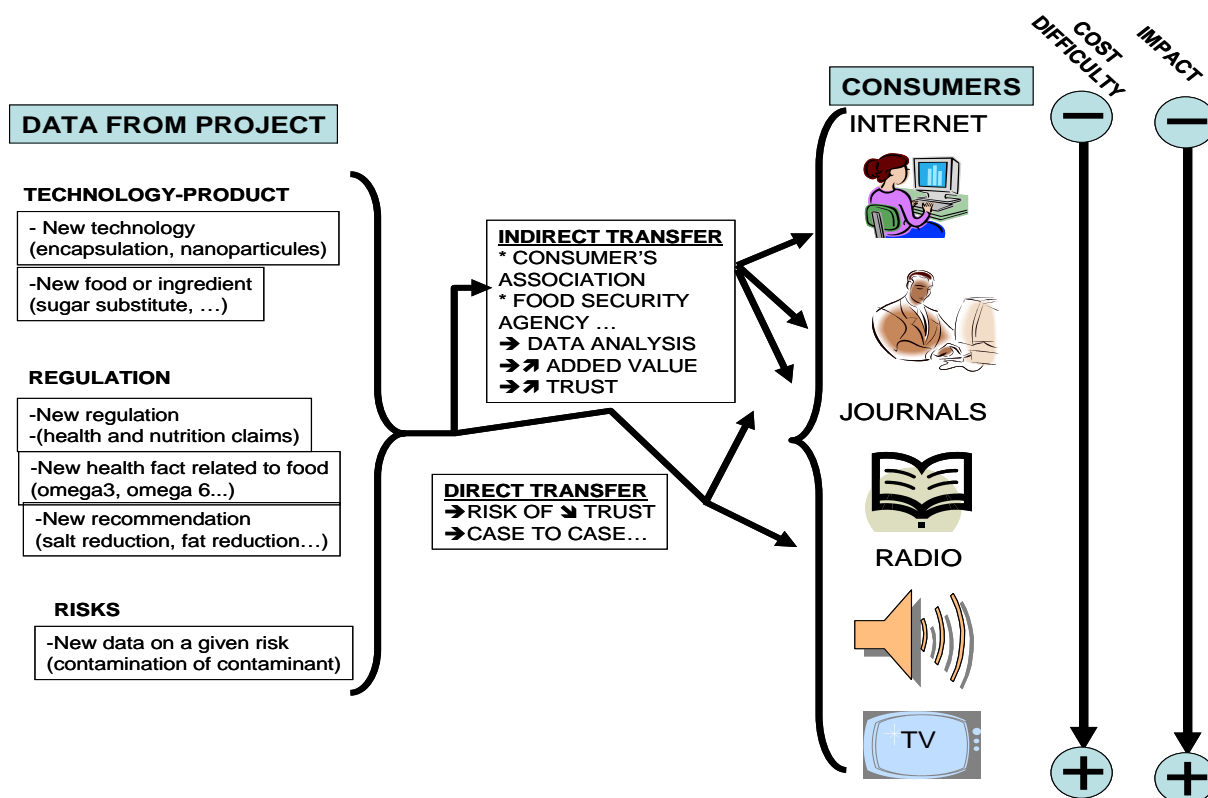


Figure 2. Schematic overview of transfer of research results from science towards consumers. Transfer through a consumer association may have a positive impact on the “message”, in particular if an independent association is chosen.

Purpose of Communication

Every “new” information e.g. discovery of new products, improvement of new processes, or simply new findings or knowledge is worth to be communicated, but not in every case directly to the consumer. In each communication process, the target audience needs to be identified in advance. When dealing with a communication process addressing food research issues, not only the targeted audience but the context surrounding this audience is also analyzed, (see guides of good practices for communication towards food SMEs and towards policy makers [3], [4]).

In case of communicating food related issues to consumers it is important that researchers identify the main reasons of motivation for consumers to adapt this information. It is worth to reference to the ‘Guidelines on Science and Health Communication’ issued by Social Issues Research Centre in the UK in 2001 [5]. Although the focus lies on the communication to the media the guidelines make a number of specific recommendations when communication to the general public:

- Be careful when expressing changes in relative risk in percentage terms, particularly when the existing risk is a very low one (e.g. only 1 person in a million is affected).
- Be careful when comparing novel risks with real-life situations with which the public may readily relate - such as the risk of being involved in an accident or winning the lottery.

- Be careful when acknowledging that anything is ever safe. This excessively purist approach, while scientifically correct, is open to considerable misinterpretation. If sufficient well-substantiated information is available, showing acceptable results for a particular issue and no adverse safety issues have been raised, the balance of probability becomes so strong that it is good enough purely in terms of common sense to state that the level of safety is acceptable [6].

Communication towards consumers is mainly motivated by the need for:

- **Awareness:** in raising awareness for the own research scientists may influence the behaviour of consumers. Communication may include the main goals to be achieved and the most relevant results obtained.
- **Understanding:** the research may have direct influence on the market or production processes through new knowledge which may be shared with consumers.
- **Action:** if the research results indicate necessary actions the communication should trigger real changes in consumer's attitudes or habits.

Targeted audience

Consumers represent a much diversified audience, constituted by household tenants, children, teenagers, people with other cultural background, elderly people, etc. They are not interested in acquiring specific knowledge for the mere sake of it. They need to understand the message and see the real benefits that research brings for them.

The landscape is thus made of many groups and subgroups, in which subgroups differ from each other in culture, religion, status, age, sex, country of residence and economical resources, among others.

Sender

The origin of the sender (the communicator) of data (results) can have a great influence on how the receiver will perceive the information. Given results about GMO or chemicals in food may be perceived differently by the consumer when the message comes from a biotechnology company, from an independent research organisation or from a national food safety organisation. In this context, there are 3 possibilities you need to consider:

- Media is the sender: Nowadays, more and more journalists contact directly scientists, even before results are actually published. With this approach they are considered to have first-hand information.
- Researcher is the sender: Researchers are encouraged to communicate directly to the consumer. They should involve the consumer to express an opinion and to participate in the research processes. This process of science communication includes the whole scientific team involved in the project. This can include many different persons with various professional skills and practices and different aims. All team members have their own experience and language



and way of communicating, which will be a benefit for the communication process.

- Intermediaries are the sender: Dissemination via a consumer association may help to increase the trust of the consumer. Associations who represent the consumer have installed the right channels and use the right language. However, it takes time to explain the research results in that way that they are correctly transferred.

Consumer associations are the voice of individuals, sometimes with an own “agenda”. They may act as “bridges” that bring together consumers and science. In a more global approach, consumer associations quite often show a certain way of thinking. They can be broad and very general associations (national representation) or they can have a specific attitude or policy related to a food concept (e.g. a slow food as opposed to a fast food concept, organic food, vegetarian food ...). However some associations may refuse to transmit specific results, or they may distort the message according to their own interests or beliefs, so take into account that transferring a specific message through these associations can result in very different interpretations by the consumer.

The different perception of the sender is highlighted in the following figure 3. In a special Eurobarometer survey in 2010 [6] consumer responded to the question “Suppose a serious food risk where found in a food you eat regularly such as fish, chicken or salad. How much confidence do you have in the following sources to give you accurate information on the risk?”. The survey shows that EU citizens are the most confident in “health professionals” (84%) as providers of accurate information about serious food-related risks (31% very confident and 53% fairly confident). Confidence in “family and friends” as sources of information on food-related risks is similarly high (82%). In addition, approximately three out of four respondents are confident in information from “consumer organisations” (76%) and “scientists” (73%), but confidence in food manufacturers is really low.

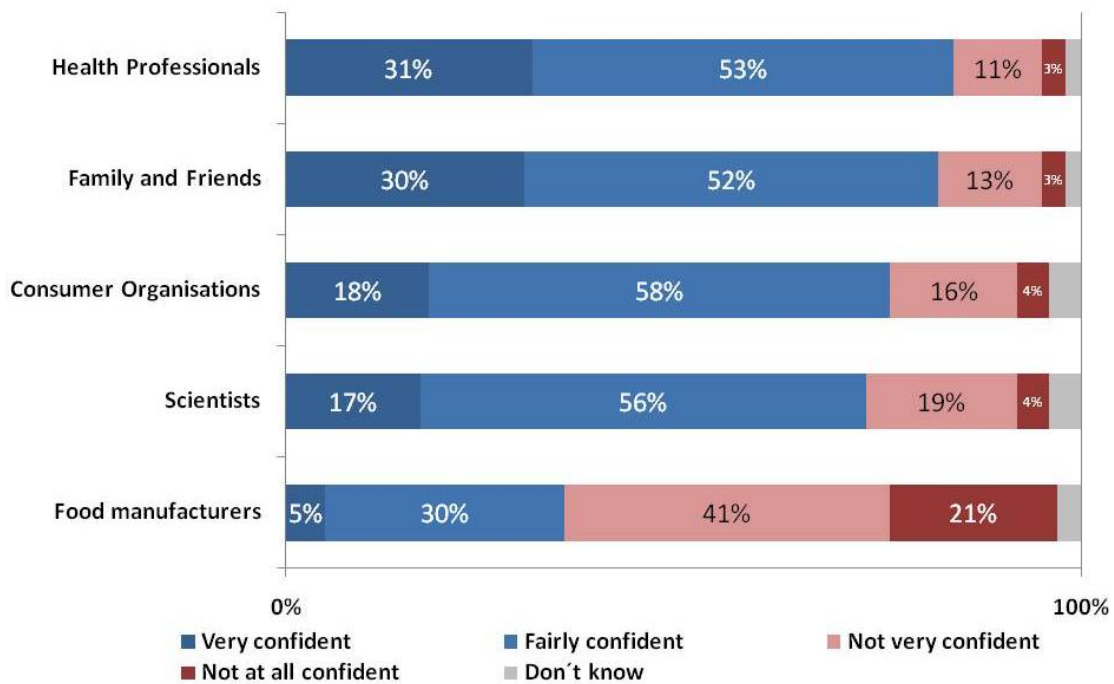


Figure 3: Special Eurobarometer 354, FOOD-RELATED RISKS, November 2010, page 45 [7]



Communication channels

Communication between scientists and the audience does usually not take place directly, most of the times communication occurs through an intermediary (e.g. media or associations). As will be detailed in the latter sections, media is the first speaker for consumers. More than a half of the population obtains information from TV, and to a lesser extent, from radio, newspapers and magazines [8].

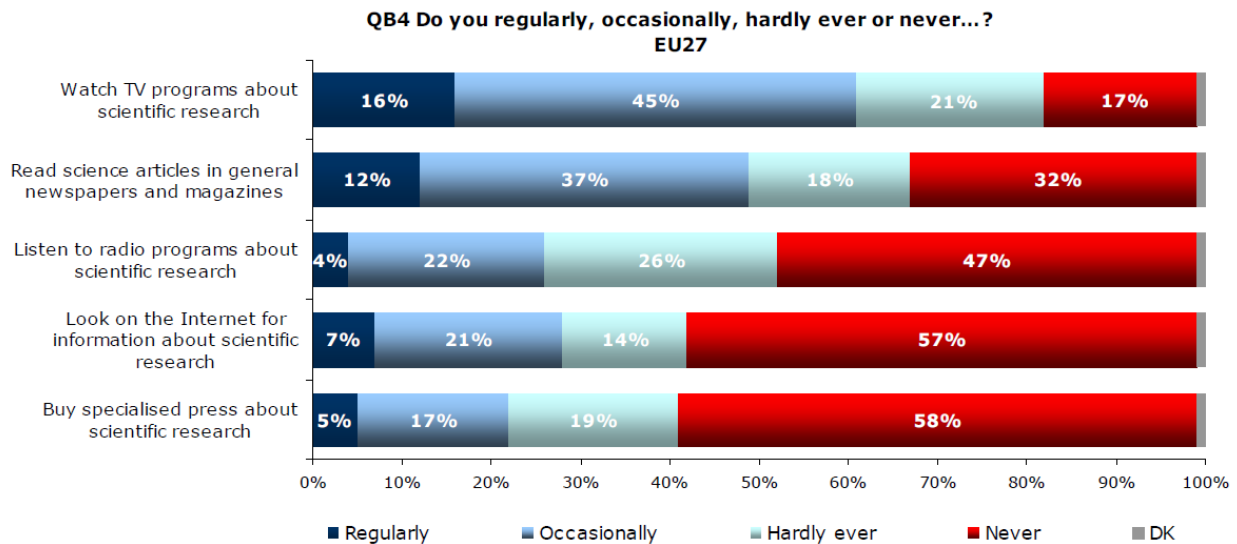


Figure 4: Sources for scientific information [8]

Television is also the most trusted source to get scientific information [8].

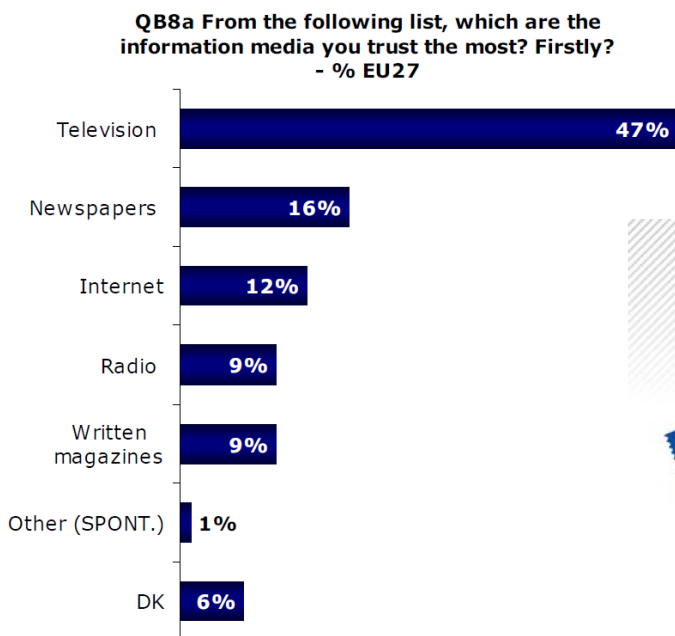


Figure 5: Most trusted source for scientific information [8]



Figure 6: Logo of EU Consumer Summit 2011 [9]

Depending on its subject and content the researcher should be able to choose the best channel for the specific communication. An interesting channel for the understanding and informing of consumer and consumer representatives may be the European Consumer Summit organised by the European

Commission DG SANCO. It comprises of different presentations and workshops where everybody may take part.

3. Particularities of the communication of food science towards consumers

A researcher has to respect the specific, strong relationship that is established between consumers and food. Food is such a fundamental part of everybody's life that almost everyone is genuinely interested in what goes into it and how it is made. It is not just a matter of buying something, food products are directly related to the organism. They are ingested by consumers and this fact triggers a special concern in consumers. The majority of Europeans associate food and eating with enjoyment. According the Eurobarometer survey on food related risks [7] those who are concerned about possible food-related risks tend to worry more about chemical contamination of food rather than bacterial contamination or health and nutrition issues. This perception conditions their choices of food products, sometimes this behaviour is maintained for a long time, and therefore contributes to their health, their concerns about food issues, and their predisposition to receive food information. Also, as a consequence of recent food safety incidents, consumers trust on European food safety management has diminished, and the need for transparent clear communications is an increasingly general demand. Food also influences many other areas, such as the environment, progress and economy, for which the consumers' concern has also increased.

All these factors need to be analyzed in advance, so that communication is carefully handled. Once all these factors have been analyzed, and before defining a dissemination strategy towards consumers for your food research project, it is necessary to consider as well that these factors present certain particularities characteristics each of these factors may present in a communication process that is specifically oriented to consumers. In this chapter, the most relevant characteristics of this communication process will be reviewed.

Particularities of the message

In this communication process the core message is determined by the subject of the project and the content of the results. This message is mainly launched to inform consumers about ongoing studies within the food sector or to make them understand results from research obtained in this sector. However, consumers are very concerned about food related issues, so you need to approach your communication strategy with certain considerations, especially when you provide information related to controversial scientific issues.

Several parties have dealt with the communication of food risks and a significant amount of research has simultaneously been made on building up consumers' concerns and trust. Over the last 30 years, social scientists have studied the different perceptions of food risks that an average citizen perceives, and it has been clearly shown that there is a great difference between experts and consumer's perceptions. Results suggest that risks communication should be conveyed by acknowledging the consumer's risk perceptions and information needs, including individual differences in the



consumer’s preferences and requirements; differences related to the social, cultural, and economical background of consumers, together with the disparity of food regulations in the different EU countries should also be considered. In addition to this, information about what is being done to identify, prevent and manage food risks needs to be communicated to consumers, as well as results from food research and the scientific uncertainty and variability that sometimes is associated with these issues.

Consumers tend to value and weigh other factors apart from science in risk management. For example scientists rank the risks of pesticide residues and other contaminants in food in position 4, whereas consumers set it within the first position - as one of the greatest concerns. This is due to the fact that consumers feel that they have no control over how much residues they ingest with food and what harm it does. Therefore so they perceive that they cannot protect themselves. Whereas in the case of GMO food or new food products they do not want to have new technologies they cannot assess either.

Usually, scientists approach to contamination risk is to “educate consumers”, communicating from their own perception and trying to make consumers understand the same way scientists do. On the other hand, consumers and consumers’ organisations feel they don’t need to be educated, their approach is perceived as part of a process in which they expect and want to make sure that scientists and policy makers make the right choices and take their concerns on this issue seriously. The main goal of research communication should be to make consumers understand the results. Here are some tips that may help as a start:

Key steps for communicating with Consumers	
1	Try to gain their trust. The main barrier you will find is their distrust of science, and therefore, of experts. Avoid at any means arrogant attitudes and do not underestimate their ability to perceive and understand science.
2	Use simple language, with simple scientific and technological terms, and make sure you provide clear transparent information.
3	Define problems openly, and when offering and presenting solutions, do not be afraid of showing that safety is relative.
4	Identify the uncertainties and show what is known and unknown in your research.
5	Involve and encourage them to participate in your debates and fora, and show them they are welcome participants. This will help to increase transparency in your projects and your decision makings.
6	Make sure you provide them with answers: what, when, how, to what extent, etc.

Particularities of the communication channels

Several sources [1, 2, 8] confirm that around half of the population obtains information from TV, and to a lesser extent, from radio, newspapers and magazines. Internet plays a less important role in



informing the public but gains importance and should be considered as well. The best would be to combine some communication channels to reduce the financial investment.

Advantages (A) and Disadvantages (D) of Television

A	<ul style="list-style-type: none"> ☑ It will reach consumers directly in their homes. Preferred communication channel for consumers. Large audience. ☑ May be seen by not interested consumers who are not reached by other means. ☑ Science can be made very attractive. ☑ Can be diversified to fit many different audiences ☑ Efficient and can quickly spread information
D	<ul style="list-style-type: none"> ☑ Images cannot be tailor-made, images can carry different meanings for different people; danger of being misunderstood, one-way communication ☑ Not all viewers purchase the same channels (giving differing messages to everyone) ☑ Very challenging, intense in preparation, high costs ☑ Limited time to explain your work and the main concepts of the related issue ☑ is mainly perceived as a form of entertainment



Combine advantages of images with the distribution of the Internet. There are a lot of possibilities to spread interesting videos on your research. Be creative (see examples below).



Source: <http://www.mevio.com/channels/>



Source: <http://www.foodreference.com>



Advantages (A) and Disadvantages (D) of Radio

A	<ul style="list-style-type: none"> ✓ Possibility to talk about more specific topics, more daring topics, and to satisfy particular groups of society. ✓ Radio is less costly than TV. ✓ Words are not distracted by music or noises. ✓ It may reach a large audience. ✓ Very appropriate medium to introduce new issues related to food or nutrition and to give consumers the first piece of information that will allow them to understand new concepts.
D	<ul style="list-style-type: none"> ✓ Voice must be trained and pleasant. ✓ A spoken message is difficult to understand and needs a lot of attention of listener. It is better the repeat the core message several times. ✓ Danger of being misunderstood, one-way communication



Combine advantages of oral presentation with the distribution of the Internet. There are a lot of possibilities to spread interesting podcasts on your research. Be creative (see example below).

The screenshot shows the EUFIC website interface. At the top, there is a search bar with a magnifying glass icon and a 'Search' button. Below the search bar, the EUFIC logo is visible. A navigation menu on the left lists various categories: Food Safety & Quality, Food Technology, Nutrition, Health & Lifestyle, Diet-Related Diseases, Consumer Insights, Food for thought, EU initiatives, In the spotlight, and Energy Balance. The main content area features the title 'Nutrition, overweight and obesity in Europe' with a sub-header 'December has been a busy month for the European Commission...'. A 'Full podcast' player is embedded on the right, showing a video thumbnail of two people in a meeting and a progress bar. Below the player is a 'Download full podcast' link. At the bottom left, there is a small text box stating 'This site complies with the HONcode standard for trustworthy health information: verify here.' At the bottom right, there is a contact information box for comments or questions regarding the Commission's mid-term progress report for the 'Strategy for Europe on nutrition, overweight and obesity-related health issues 2007-2013'.

Source: EUFIC [14]

Excursion

The above stated advantages and disadvantages apply if we look at developed countries such as European Union and others. It may not apply if the research wants to spread his information in other



countries as the following example shows [13]:

Radio is the perfect medium for mass communication. If we compare it to other mass media, radio consistently ranks as the most popular means of disseminating information, regardless of the continent. What makes radio particularly appealing to research projects, however, is its interactivity, its capacity to provoke dialogue and to solicit the participation of local populations in sub-Saharan Africa. (The International Development Research Center (IDRC), Sheet 12 – Radio)

Advantages (A) and Disadvantages (D) of Magazines, Newspapers and Books	
A	<input checked="" type="checkbox"/> It is easier accessible than TV or radio. <input checked="" type="checkbox"/> In regional newspaper of the research institute there might be interest because of reputation for the area. <input checked="" type="checkbox"/> It can be stored and remembered. <input checked="" type="checkbox"/> Risk for misunderstanding is lower compared to other means.
D	<input checked="" type="checkbox"/> News is only interesting if it scandalizes food. <input checked="" type="checkbox"/> Huge competition for getting a place in these media. <input checked="" type="checkbox"/> Journalists may shape the message according to their view.



There are a lot of possibilities of online publication to spread results on your research (see links below).

Online Magazines

- **Appetite** (<http://www.sciencedirect.com/science/journal/01956663>) - Published on Elsevier. An international journal, covering areas of clinical, preventive, and experimental nutrition, eating disorders, sensory evaluation of foods, food attitudes and marketing, ethnography of food habits, psychology of ingestion. Articles are not free and have to be purchased!
- **CEE Food Industry** (<http://www.foodnavigator.com/>) - Daily news on food processing, science and packaging. Free access to news on the food industry in Central and Eastern Europe, Russia, Poland and Czech Republic. Publication is financed by advertisement.
- **EJPAU - Electronic Journal of Polish Agricultural Universities** (<http://www.ejpau.media.pl/food/index.html>) - Food Science and Technology section of the EJPAU. Covers a wide variety of research, published in electronic version, all issues available for free.
- **Food Manufacture** (<http://www.foodmanufacture.co.uk/>) - UK online magazine publishing news on food and drink manufacturing and production.
- **Food Traceability Report** (<http://www.agra-net.com/>) - Newsletter, global in scope, on the regulations, technology, and people shaping the tracking of foods from farm to market. Free trial for 30 days, payment required for full access.
- **Journal of Dairy Science** (<http://www.journalofdairyscience.org/>) - Official publication of the American Dairy Science Association. Lists results of new research in dairy foods, physiology and management; nutrition, feeding, and calves; and genetics and breeding. Includes archived sample issues.
- **Molecular Nutrition & Food Research** (<http://www.wiley-vch.de/publish/en/jour->



nals/alphabeticIndex/2216/) - Journal devoted to health, safety and all aspects of molecular nutrition such as nutritional biochemistry, nutrigenomics and metabolomics. Payment required for full access.

- **New Food** (<http://www.newfoodmagazine.com/>) - Quarterly business and technology magazine for European food and beverage manufacturers. Contains short reviews of latest technologies, payment required for full access.
- **Nutrition Journal** (<http://www.nafwa.org/fulltextarticles.php>) - Free full-text articles from Nutrition Journal.
- **TechQuarterly - Master Brewers Association of the Americas** (<http://www.mbaa.com/TechQuarterly/default.htm>) - Features reviewed and non-reviewed papers covering wide technical aspects of beer ingredients, the brewing process, by-products, ecological matters, and physical stability. Abstracts free available.
- **The World of Food Science** (<http://www.worldfoodscience.org/cms/>) - Publishes articles, news of products, policies and regulations, and diary of events. Includes contributions in Spanish.

Advantages (A) and Disadvantages (D) of Internet

A	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Internet is a massive communication channel used worldwide. <input checked="" type="checkbox"/> It enables a myriad of new forms of social interaction, activities and communication, providing society with new ways to socialize and interact (e.g. blogs) <input checked="" type="checkbox"/> Publishing a web page, a blog or building a website involves little initial cost.
D	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Has to be updated regularly. Language should be different from scientific publication. <input checked="" type="checkbox"/> It is not everywhere available due to government restrictions. <input checked="" type="checkbox"/> Once published on the Internet, the message is freely usable without any control by researchers. <input checked="" type="checkbox"/> Overflow of information, web pages are not very effective in spreading research results



Advertise your communications activities always also on the Internet.

Particularities of consumers

Consumers are always interested in food-related stories, but it should be attractive within the content of the research. It is therefore essential that scientists and associations learn to communicate with the media clearly and truthfully. Additionally, media should report trustworthy and respectful the information disseminated by scientists.

In addition to this, sometimes, the government and the scientific community can not agree on a solution to a scientific problem and this brings the parties to polarized points of view, which often



results in a breakdown of both trust and communication between political and scientific authorities and the public they are aimed to serve.

Scientists need to be able to place themselves into the consumer's position to show them their findings in a comprehensible way. Clarity and honesty are basic requirements. Consumers will accept messages easier when they are approached this way. Scientists also need to be able to communicate with consumers even when making errors and have to revise their former statements.



Communication towards consumers means that scientific results are to be communicated within a social environment and therefore messages need to be put in a familiar context. Scientists should not just supply the information, but make it available for the consumers, considering all the factors that define the situation and the context, and demanding the real understanding and real transfer of the information.

Scientists should be aware that their messages to consumer will always be followed or acknowledged by media. This should be appreciated in the sense of a broader impact. On the other hand, the risk for wrong coverage may be increased. It is therefore recommended that an agreement is arranged between the researcher and the journalist, which includes the requirement that the article or message prepared by the media is presented for approval before any communication is started. This will not be always possible but the researcher should ask for it.



4. *The challenges for scientists*

The first challenge for researchers will be to define the communication strategy towards consumers. The scientific team should be trained in communication practices. Take into account that they have the best knowledge of the project, the research approach developed and the results obtained, so they are the most capable to extract the most important aspects to be presented to the consumers. They will have to choose the most adequate tools, the right time and plan the right events or activities to be able to really reach the audience when transmitting the information.

Another challenge is how to raise the interest of the public and established a two-way communication. Compared to other issues of daily life European citizens are moderately interested in science and technology as the following figure 7 shows. Additionally they are not very active in taking part in public meetings or debates. Just 9% declared that they regularly attend these occasions [2].



QC1. In everyday life, we have to deal with many different problems and situations, where we feel more or less interested and confident. I am going to read you a number of statements. For each of them, please tell me whether you are...

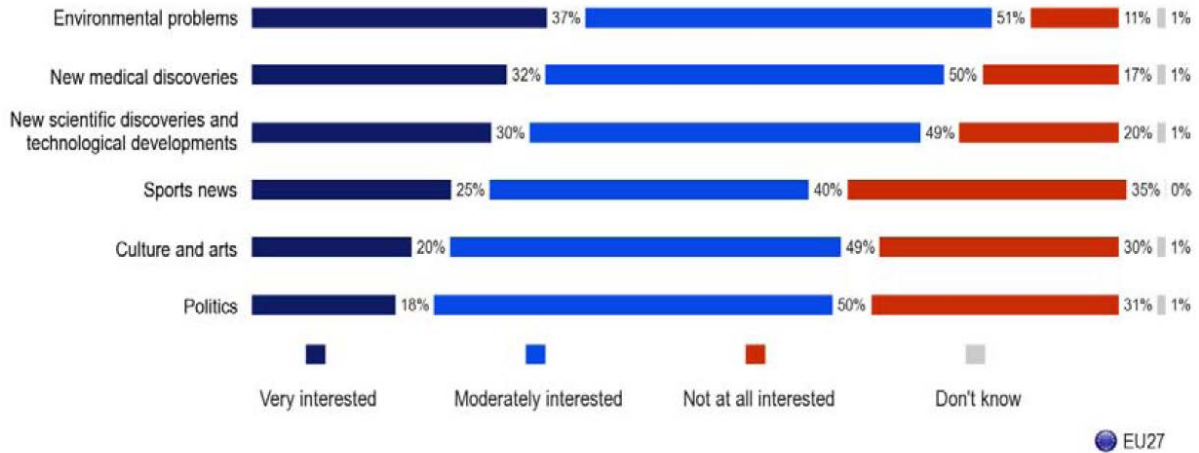


Figure 7: Interest shown by EU citizens at scientific and technology development on 3rd place [2]

QC3. And now, there will be a few questions on how you engage with science and technology. Do you...?

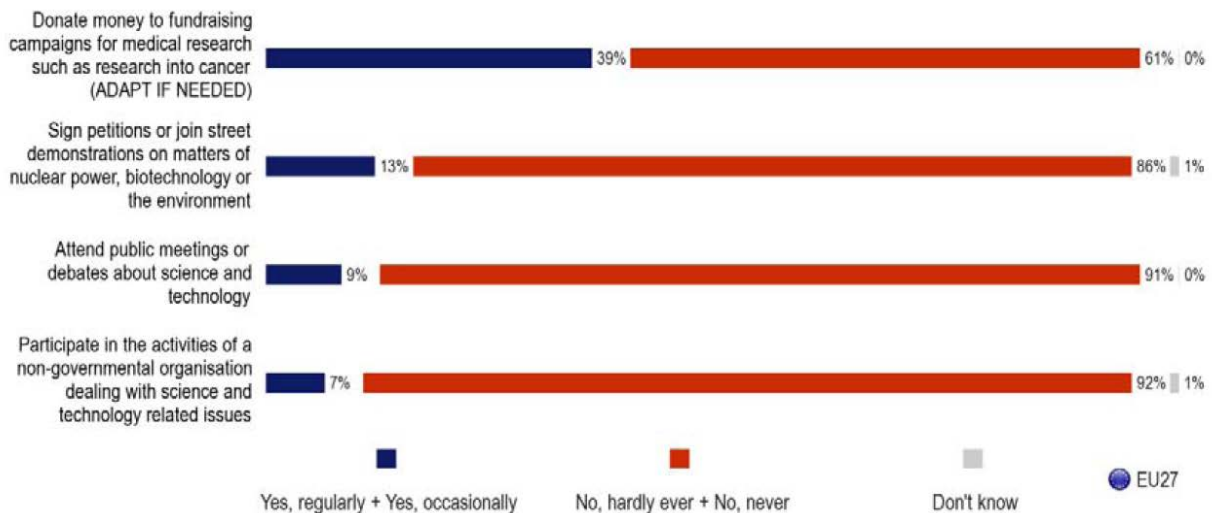


Figure 8: Engagement with science and technology for EU citizens [2]

All this implies a special challenge for researchers, on the other hand recent studies [10, 11, 12] have confirmed that consumers in Europe would prefer scientists rather than journalists to present scientific and technological information in the media, since they think it would be more precise and trustworthy. It is also important that scientists take into consideration that media provides the forum in which the relationship between science and public is constructed and pursued, but despite this activity in the communication process, they have no responsibility for improving the public understanding of science. It is the duty of the scientific community.

The scientific community should be able to popularize food science and make sure that it is not viewed as somehow "biased" or less valuable, even if they have to leave out a lot of complex



scientific information (like models / calculations) and simplify what they include in dissemination to meet the expectations and capacities of the consumers.

Keep in mind that your target audience is constituted by several characteristic groups, but the majority of these groups may not be familiar with the basic approach of your project, and they may lack of knowledge concerning such specific issues, so it is a difficult goal to achieve a high percentage of understanding. (See also Guide of Good Practice for dissemination managers of food research projects, page 21 for measuring understanding [15]).

Build a relationship between consumers and scientists

Scientists need to consider the real needs and expectations of society. The involvement of society in the discussions during the development of research programs would also help to narrow this gap. The involvement of consumers and consumer associations in monitoring research activities and participating in their results and progress brings scientists and society together and helps assure that research and results match public/consumers needs.

Already in 2001 the Institute of the Future [16] postulated that consumers will actively engage with science:

“The information-searching behaviors of new consumers will expand dramatically in coming years as detailed nutrition information becomes available”. [16]

In this aspect, scientists should be able to awake the interest of consumers, involving them in the projects and encouraging them to be more participatory. All the above-mentioned issues make the relationship between the science and society very paradoxical. Currently the level and the quality of communication are not satisfactory between the scientific community and society.

New relationships have to be established between all stakeholders involved in the food area, whether as consumers, as manufacturers, as politicians, as journalists or as researchers. This new relationship would affect the impact of research and the competitiveness, the growth of the economy, the creation of jobs and, through that, the quality of life in the EU. Explanation of scientific knowledge to the consumers should be a priority if the project has consumer related results. Use all means to spread your messages – especially the Internet. Interestingly, according to the latest Nielsen Global Online Survey, more than 85% of the world's online population has used the internet to make a purchase - this is about 875 million, up 40% in the last two years [17]. Why not combine this with information on research results?

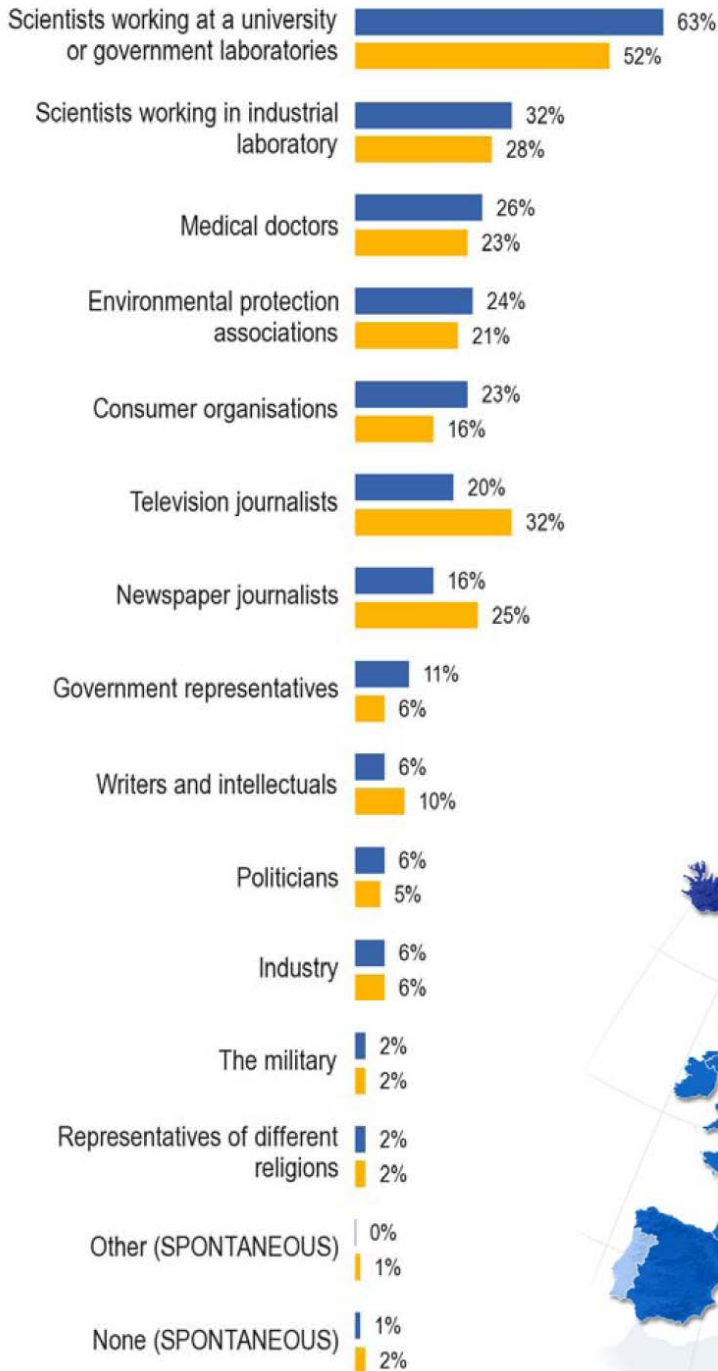
Gain reliability

Researchers made a good progress in the last years to show their reliability to consumers. According to the Eurobarometer on Science and Technology [2] 63% of European citizens agree that scientists working at a university or government laboratories are the best qualified to explain scientific and technological developments as shown in the figure 9. Scientists working in industrial laboratories are



considered the next best at 32% of respondents at the EU27 level, probably because in the opinion of consumers the research may be biased by industry money. The figure 9 below shows that the given

QC5. Among the following categories of people and organisations working in (OUR COUNTRY), which are the best qualified to explain the impact of scientific and technological developments on society?

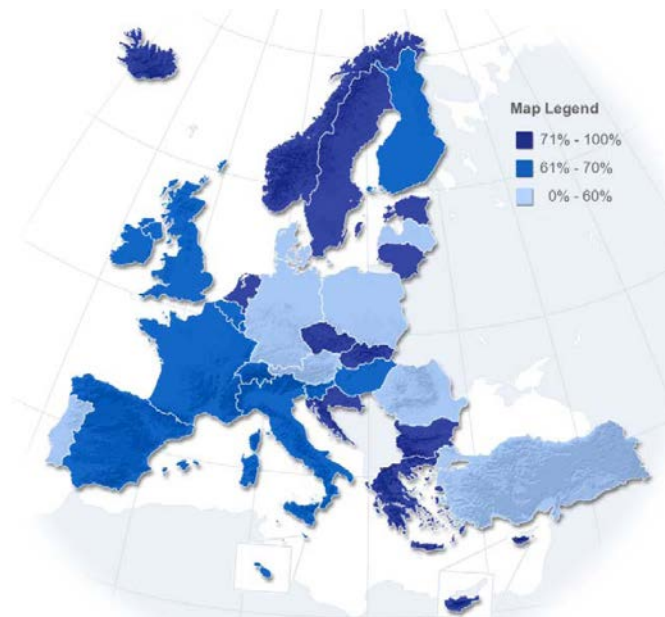


■ EB73.1, 01-02/2010
 ■ EB63.1, 01-02/2005

● EU27

importance of scientists working in universities or government laboratories has increased from 52% of respondents in 2005 at the EU25 level to 63% of respondents at the EU27 level in 2010. The perceived role of newspaper journalists has diminished from 25% in 2005 to 16% in 2010, television journalists likewise have a reduced role, declining from 32% in 2005 to 20% 2010, while the perceived quality of consumer organisations has increased from 16% in 2005 to 23% in 2010.

Interestingly, in some EU countries citizens have a higher trust in scientists than in other countries (see map below). Researchers in countries with lower trust should therefore exchange experiences with other colleagues.



5. *Food research project communication*

In all projects, three main stages can be distinguished; the Pre-results stage, the Awareness stage and the Post-results stage. These stages are to be addressed differently depending on the project, the communication process itself and the target audience.

Pre-results communications: creating expectations

This stage should be prepared conscientiously. The issues or topics of interest should be expressed and presented to the consumers to generate value within their environment, i.e., with short news story in a magazine or an outline of the research on the Internet. Communicators should try to make the public curious for the topics. Highlight the issue and promote debate among consumers to create an engagement within the targeted audience.

By doing this, consumers will be able to understand why specific research is necessary, and they will be able to value the results afterwards. This stage should create and lay solid foundations for the next stage. Previous explanations and contextualization is fundamental to make communications coherent and in line with our aims. Communication should be geared towards the aims and interest of society and should make sense to the public in general.

Awareness stage: “while communicating”

This stage covers the whole period of the project and the accompanying communication.

Key actions in the awareness stage	
1	Make innovative formats. The way that results are communicated should be innovative; communicators should be able to present results in a way which is easily transmitted and retained. Using photos, videos and images makes communication more effective.
2	Address communication differently from the traditional methods everyone knows. Try to surprise your audience, i.e. with funny entertaining presentations and material, nice caterings, etc.
3	Adapt the results from your project to the variety of groups of consumers you may find, and not the other way round. If you are communicating to specific subgroups; i.e. if the communication is directed at children or house tenants, an effective way to communicate is organizing workshops in schools or associations, e.g. at places where consumers have the opportunity to participate.

During this stage there are certain aspects that need to be taken into consideration:

- It is necessary that scientists and technologists contextualize and reduce the technical level of the information, adapting the language and the contents of the information for consumers.
- When research results are to be communicated by scientists, they should also be trained on this specific type of communication. It is important to teach them on what to say and how to



say it.

- The most important concepts concerning the issue should be explained with clarity and the use of technical terms should be reduced as much as possible.
- The attitude and willingness of the scientists are also important factors. The scientific community should understand the importance of the message they give; they transmit progress in science to society, and this is sometimes a very difficult task, for which they need to be prepared.

Post-results communications

If results are available the researcher may justify the spending of tax money in explaining the results or the general public. Very important are the potential benefits and applications with regard to consumers and their lives. However, researcher shall keep in mind that these stages vary in each project. For example, a project addressing an interesting topic, also familiar to the citizens, can awake great expectations during the first stage, and it can provide relevant results during intermediate stages that you may consider interesting for the consumers and that you may want to disseminate. In some other cases, projects address less familiar/popular issues, so they go unnoticed until the final stage, in which relevant results are obtained and the public is made aware of them.

Good communication with consumers starts at the pre-results stage. During this period, the attention of consumers is caught and consumers are put in the picture, so that the context of the whole subject becomes more understandable to them and their interest is caught. From this stage communicators should be able to select the relevant information and send clear straight-forward messages, and they should continue to give fresh, new information as the project evolves. Within new communications and results, there should always be a summary of the original issue as a reminder, to keep consumers situated within the thus created familiar context and focus on the concrete information/data that is given about the subject.

Tips for better communication towards consumers

Language	<ul style="list-style-type: none"> ☑ Should be plain and straightforward. ☑ Terms and processes involved in the subject should be explained with clarity. ☑ Headings should be kept short, preferably not longer than 2 lines. They should include active verbs and be dynamic to be able to appeal to the consumer's curiosity. ☑ Text should be arranged in order of descendant importance, so that the first bit of information for the consumer to see catches their attention.
Style	<ul style="list-style-type: none"> ☑ Scientific results are not necessary to be cold and dry, and making them simpler does not make them less worthy. ☑ Communication towards the society can also be dynamic and entertaining.



Tips for better communication towards consumers	
Visulisation	<input checked="" type="checkbox"/> Use photographs, images and colours to create visual impact. This will help consumers to capture, assimilate and remember the information in the message.
Content	<input checked="" type="checkbox"/> Should be interesting for consumers <input checked="" type="checkbox"/> Avoid too scientific explanations (consumers are interested in final results and how this can affect their lives not in the research and the procedures itself).
Timing	<input checked="" type="checkbox"/> Promote the public awareness for your scientific team (this can be carried out in various stages of the project or even independently) <input checked="" type="checkbox"/> Promote the project results when you really have something interesting to show to consumers
Consumer	<input checked="" type="checkbox"/> Keep in mind that you may encounter very different profiles within consumers; those who have heart problems, obesity, raising children, etc, whose priorities are completely different <input checked="" type="checkbox"/> Use different strategies to approach these specific groups
Tools	<input checked="" type="checkbox"/> Use general tools to approach consumers (as general public): magazines, radio, television, etc. <input checked="" type="checkbox"/> Use specific tools to approach special groups (i.e. educational campaign in the schools of a region, product demo in a supermarket, etc)

6. *Preparation of the final communication plan*

The elaboration of a dissemination plan is a very detailed task that every researcher needs to carry out carefully. The following list of questions may help you to go through all the main aspects you need to consider to carry out this task successfully.

What do you want to disseminate?

Identify the outcomes of your research you want to disseminate and make sure that all members of your team share the relevance of these outcomes and understand the necessity to disseminate them. This is a key point when you want to make a successful dissemination.

Try to unify the vision of the members and to create a unique and clear message. Define homogeneous criteria; try to elaborate an internal protocol of action for the participants of your project to support and guide all dissemination activities to an external audience. This way you establish a consensus on the objectives of the dissemination, ensuring the appropriate information is given each time and that all partners give the same message.

It is recommended that a person be appointed to be in charge of the development of this plan and in control of the strategy defined.



Which benefits are associated with the research results?

It is essential that the results of the research should be phrased in such a way that they comply with the adequate context when presenting them to consumers. Remember that the most effective dissemination strategies are those that engage the users and deliver what they need or what they want. So take your time to think about it, are you offering a potential solution for a specific problem? Is it a solution for a larger group? Or is it just a new product or development you want to present?

It is also important that you identify the best way to present these results and that you present them as potential solutions or benefits. Place yourself in the consumers' shoes and try to think about how you would like them to be offered to you.

When should dissemination take place?

Experience from earlier projects has shown that dissemination should be done from the very beginning. All dissemination activities should be planned out during the preparation stage of your project. In this phase, you should determine all of the objectives and milestones of your project, and then you can better determine how to go about realising a successful dissemination.

Researchers should consider the desired extent or impact they want to achieve with the dissemination plan. For example, the degree of dissemination will be considerably higher if you choose to organize a press conference to disseminate a new food product, than if you choose to organize a seminar in a school. You must also consider your audience's level of understanding. Set realistic and achievable objectives, and begin to plan the time you will need to reach these goals. Focus on the quality of your dissemination activities rather than just on the quantity.

Starting a dissemination activity early will increase the impact it can achieve. Provide consumers with a notice in advance of what you have planned so that they have time to become interested in the matter and finally to get involved. The early communication of results supports engagement and helps to create expectations concerning your work. It is not necessary that the product or the process development be fully completed to start the dissemination. Providing information during the activity will help to incorporate consumers in the process, facilitating their understanding of both the objective of the project and its context.

Working plan: organizing the activities on time, timing and the location of the organized events are also very important. Try to insure that the activities are carried out in a proper or familiar venue. Consumers have to feel comfortable and relaxed. This will allow them to focus more on the activities. Very important is the use of the local language to engage consumers.

How should you disseminate?

The selection of your communication tools is a part of your plan that requires special attention. Keep in mind that these are the vehicles of your dissemination process, and that the traits of your target group should be taken into account when selecting these tools.



Check list

- ☑ select your message;
- ☑ identify the relevant media association for the content of the message and the target audience;
- ☑ select your communication channels
- ☑ prepare a press release
- ☑ choose the most adequate communication tools
- ☑ ask for a signed agreement on “control of the final information”;
- ☑ if possible, centralize the “feedback point” (one email, one web site, one contact person,...)

7. *Communication tools*

Selection of communication tools is a key decision in the development of your dissemination strategy. Keep in mind that most consumers prefer not to be subjected to long written papers. Oral communication has been proven to work much better when dealing with this type of audience.

There is usually a consumer demand for an explanation of the main trends in the results and the associated consequences. Consumers expect that the person who is explaining the scientific issues is able to talk in a clear, simple, understandable way, as well as understand their need for information by answering their questions.

Websites, blogs and fora

Publishing and maintaining websites with attractive, diverse and up-to-date information can be time consuming and sometimes expensive. This method has proven to be a very effective way of providing consumers with information.

Make your website dynamic and visual. Show consumers that the information has been adapted to their interests and do not forget to create a page where they can share experiences and exchange opinions. This site will also help you to evaluate dissemination levels and to understand the level of your results. You will be able to read their opinions and to find out whether the subject proved to be interesting, if they saw the real application of it, and also what difficulties they might have encountered.

Blogs and fora require special attention, given that the messages need to be phrased in such a way that is both accessible and easy to disseminate, understandably. There is also a general lack of trust of the population regarding the information that is available on the web. If the information is communicated through an acknowledged official organisation (such as a consumer association, etc) that has a good reputation, it will be seen as more reliable.



Seminars and congresses

These activities are very effective for dissemination, but not used for the dissemination directed towards consumers. These events are orientated mostly towards scientists, the most important aspect being the presence of the speakers, who are normally celebrated individuals in the scientific world.

Consumer-oriented fairs and exhibitions

Fairs and exhibitions can be effective tools for dissemination on a different scale. Fairs and exhibitions are very often oriented to sales of products, so there is a major presence of SMEs. The organisation of these events is focused on introducing consumers to new products and providing them with more detailed information. Associated open sessions may be a good opportunity to present research results.

Consumer-oriented workshops

Nowadays, citizens are increasingly willing to learn through experience. This is a general increasing trend that has stimulated change in communication process. Demonstrations, exhibitions, and virtual or interactive experiences are a good way to transmit your results or developments while engaging consumers mentally at the same time. Also, in workshops consumers get the possibility to interact with the new product or new information. In some cases they are given the opportunity to learn the practical uses of the new devices, see the design of some of the products before they are launched to the market, use test machines simulators, or get in touch with the scientists responsible for it.

It is recommended that you keep a regular flow of information directed towards consumers, rather than taking advantage of random opportunities or just concentrating the dissemination of your project on one bigger event. Organize such events which allow consumers the chance to meet; this will promote their debating and sharing of opinions, and it will contribute to the spread of the information about your project.

Once you have selected the type of event or activities you will be carrying out, as well as which tools you will be using, you need to define what type of event or activity it will be. Once defined, the promotion of these activities will play an important role:

- ☑ Use your network contacts. Get in touch with professionals who are associated with the main subject of your project. The participation of these people, being professionals of their field and having a credible reputation, can promote your work and add value to your dissemination activities.
- ☑ Create new contacts with participants of other projects who have previously organized similar dissemination activities. If their participation in these events proved to be satisfactory to the audience, consumers will be more likely to attend again. Also these consumers will encourage others to participate in the activity.



Tips for a communication plan	
Project overview	<ul style="list-style-type: none"> ☑ Check and analyze your project in order to highlight and draw conclusions from those objectives that are most relevant for consumers ☑ Show the potential benefits to consumers that are associated to these results; healthier food products, changes in food habits, recommended intakes for prevention of disease, etc.
Dissemination goals	<ul style="list-style-type: none"> ☑ Identify main goals of your dissemination plan and consider the results you expect from dissemination activities
Target audiences	<ul style="list-style-type: none"> ☑ Identify the different groups to which results may be disseminated. It is possible to define primary and secondary audiences
Key messages	<ul style="list-style-type: none"> ☑ The content should be explained clearly within the initial stages of the project, highlighting its relevance and the main results ☑ Try to provide updated information in relation to the progress of your project, and indicate always what the foreseen steps are for the future, regarding the results and its communication.
Sources/ Messengers	<ul style="list-style-type: none"> ☑ Select the proper messenger to guarantee the interaction between your message and your targeted audience; <ul style="list-style-type: none"> ○ Train members of your team on communications skills ○ Choose researchers with experience in dissemination ☑ Choose to incorporate intermediates (consumer associations, national Food safety associations, ...) to your dissemination activities to increase your impact
Activities	<ul style="list-style-type: none"> ☑ Organizing demos, interviews or gathering consumers in groups of discussions may help conveying your message. ☑ Promote the interaction and debate between food scientists and consumers.
Budget	<ul style="list-style-type: none"> ☑ Plan all the activities carefully. ☑ Do not overestimate or underestimate the cost of your activities.

Tips for a communication plan

Evaluation	<ul style="list-style-type: none"> ☑ Set measurable criteria to evaluate the activities developed and the attitude and effort of your team ☑ Make attendees of the events share their impressions and opinions with you ☑ Provide sample questionnaires to the audience to get opinions about the facilities, the speakers, etc, to be able to have a feedback on the event ☑ Try to set a single feedback point to collect all the feedback messages; it is normally the task of the person responsible for the communication strategy
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