Toward Improvement of Risk Communication on Food Safety

November 2006

Food Safety Commission

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<History of Committee Discussions>

August 30, 2004	The 10 th Risk Communication Expert Committee Meeting
October 18, 2004	The 11 th Risk Communication Expert Committee Meeting
February 4, 2005	The 12 th Risk Communication Expert Committee Meeting
March 16, 2005	The 13 th Risk Communication Expert Committee Meeting
April 27, 2005	The 14 th Risk Communication Expert Committee Meeting
July 4, 2005	The 15 th Risk Communication Expert Committee Meeting
August 1, 2005	The 16 th Risk Communication Expert Committee Meeting
August 31, 2005	The 17 th Risk Communication Expert Committee Meeting
September 13, 2005	The 18 th Risk Communication Expert Committee Meeting
September 27, 2005	The 19 th Risk Communication Expert Committee Meeting
October 17, 2005	The 20 th Risk Communication Expert Committee Meeting
January 13, 2006	The 21 st Risk Communication Expert Committee Meeting
February 20, 2006	The 22 nd Risk Communication Expert Committee Meeting
March 20, 2006	The 23 rd Risk Communication Expert Committee Meeting
April 25, 2006	The 24 th Risk Communication Expert Committee Meeting
May 15, 2006	The 25 th Risk Communication Expert Committee Meeting
June 20, 2006	The 26 th Risk Communication Expert Committee Meeting
August 4, 2006	The 27 th Risk Communication Expert Committee Meeting
September 7, 2006	The 158 th Food Safety Commission Meeting (Releasing the draft report)
September 7-October 6, 2006	6 Public comment for the draft report

Public comment for the draft report September 7-October 6, 2006

The 28th Risk Communication Expert Committee Meeting October 23, 2006

The 168th Food Safety Commission Meeting (Releasing the report) November 16, 2006

< Members of Food Safety Commission >

by June 30, 2006

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> Naoko Koizumi Motoko Sakamoto Yasuhiko Nakamura

Seiichi Honma Takeshi Mikami

from July 1, 2006

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from October 1, 2006

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1. Introduction

Since its first meeting on September 17, 2003, the Risk Communication Expert Committee has studied and discussed ideal methods of risk communication about food safety issues in response to a Food Safety Commission request.

In the past the committee conducted studies and discussions in order to complete a report "The State and Issues of Risk Communication on Food Safety in Japan", hereinafter referred to as the Current State and Issues, which was approved by the Food Safety Commission at July 2004. Since August 2004, the committee started to study and discuss with regard to developing effective risk communication methods based on various points to be put forward as guiding policies in the near future. (For the uptake status, refer to the attachment.) Further, from August 2005, when the Basic Law on "Shokuiku", food education, took effect, studies and discussions on how the Food Safety Commission could contribute to food education have been added to the agenda.

In order to develop effective risk communication methods, the committee has continued to examine the methods that it receives at each of its report meetings on government-implemented risk communication, as well as from the presentations by fifteen experts inside and outside the committee.

Based on those presentations, this document reviews some possible directions for improving the government's recently implemented risk communication. We hope that this document will serve as a major reference point for the government's initiatives on food safety risk communication in the near future.

2. Discussions at the Risk Communication Expert Committee

(1) An overview of each expert committee member's presentation and discussions

The Risk Communication Expert Committee had presentations and suggestions on risk communication requirement from fifteen experts inside and outside the committee between its 15th meeting (July 4, 2005) and the 24th meeting (April 25, 2006). This was in response to the Food Safety Commission's requests and to initiate implementation of the improvements required in the government's food safety risk communication. An overview of each presentation as well as questions and answers are shown in Table 1.

It could be summarized the discussions during this period from the point of view of: (1) whether announcement, communication, and sharing of information are being appropriately implemented or not; (2) whether interactivity of opinions and information exchange are ensured or not; and, (3) whether risk communication methods are efficient or not. We conclude that the current state of the government's risk communication is as follows:

1 Announcement, communication, and sharing of information

A. Announcement of information from the government

Given the fact that the positions and perspectives of the stakeholders tend to differ, the primary importance of the government announcement's of its stance on risk management being

first and foremost correct, simple, rapid, and readily accessible was again reiterated. The government position should be scientifically formulated and based on scientific risk assessment, while taking into account a range of social and economic perspectives. However, it was suggested that problems exist with regard to establishing a system and methods to achieve these objectives. For example, it is difficult to come up with accurate and easy-to-understand ways of communicating figures and probabilities and to get the public to understand risks.

The experts pointed out the need to provide target-specific information for children, senior citizens, and scientists, as well as the need for regular and thorough introduction and explanation of the scientific knowledge and data that is the basis of risk assessment. It was suggested that it is particularly important not to force points of view onto consumers, but instead to offer information that helps them to make appropriate selections and decisions. In addition, it was pointed out that it is necessary to set up meetings for stakeholders in order to facilitate the exchange of opinions and information – for example, between risk assessors and risk managers, as well as between consumers and food industries – and it is necessary to train people who can provide and communicate scientific information.

B. Communicating information

With regard to the media, which is a major conduit of information, the experts pointed out the need to closely examine content and reliability of information, as the range of media expands, for example, with the development of the Internet.

Currently, most consumers receive information relating to food safety from media reports. Some experts noted that some reports on food safety had misleading headlines while quoting figures, comments, and conclusions from the original report. Furthermore, there was a case in which a program broadcast insufficient information which led to a viewer's health being harmed.

Therefore, some experts suggested that a survey should be conducted in order to discover how the information communicated is reported, and how such reports are perceived by consumers and other stakeholders and further, how the reports influenced their actions.

C. Receiving information, risk perception, risk avoidance, and other actions

The experts also noted that many people tend to overestimate the potential effects of food and nutrients on health from the information they receive on food safety. In order to prevent this, people need to improve their ability to accurately read and select a variety of information from a wide range of media. However, it was also pointed out that clear and thorough explanations backed up by evidence are necessary to remove consumers' deep-seated distrust of food safety and the way in which the government administers food-related issues. In addition, the experts pointed out that a network of stakeholders – such as the government, local government, food industries, consumers, scientists, and the media – needs to be developed in order to effectively transmit information on food safety, and also that the stakeholders need to improve their own ability to gather and transmit information.

The above-mentioned suggestions should also be used to implement risk communication on "Shokuiku", food education.

② Interactive exchange of opinions and information

Since the Food Safety Basic Law took to effect, the quality and quantity of the provision of information on food safety by the government has significantly improved. Interactive opinions and information exchange have been gradually introduced but is still inadequate. The experts noted that a significant level of dissatisfaction exists among the stakeholders.

Specifically, the experts pointed out that the process of the review and incorporation of opinions, which starts at opinions and information collection and presentations at public meetings, is unclear. Further, they were concerned that appropriate rebuttals are not made, discussions were not held to avoid misconceptions, and that the public meetings are used by stakeholders for making statements and allegations rather than exchanging opinions.

③ Improvement of methodology and efficiency of risk communication

The experts noted that, at the time of risk communication, it is important to recognize that expert's and non-expert's risk perception is necessarily out of sync, and that, when faced with risks, human instincts and reason tend to contradict one other. In addition, they called for the development of a system where transmitters of information try to understand what kind of information is desired by recipients – in other words, a system in which communicators learn about the recipients of information, and listen to their requests. It was also noted that as well as reviewing the quality and quantity of communicated information (especially the importance of becoming selective), and improving mutual accessibility, the human side of the system needs to be developed. With regard to the implementation of risk communication, the experts pointed out the importance of communicating the relationship between risk assessment and risk management in an easy-to-understand manner.

While the development of the administrative side of human resources for risk communication (Table 2) has already been implemented, the experts called for the training of people to efficiently communicate risk among concerned government ministries and offices and to improve organization to better meet media-related needs in the near future.

With regard to the examination of issues which arose in past risk communication and need improvement, the experts suggested that the know-how in different quarters – such as the national government, local governments, industries, and consumer organizations – needs to be fully utilized.

(2) Findings from risk communication researches

The following findings were obtained from the researches conducted by the Food Safety Commission (Table 3).

① Case studies on risk communication in foreign countries

- A In Europe, some consumer organizations have a highly developed policy analysis capability and the scientific expertise to ensure food safety. These organizations also cooperate with government institutions and participate in policymaking and planning proposals.
- B The following are examples of positive food risk communication from the Netherlands and Canada
 - > Information is provided on the web and other forms of media and is target-focused;
 - ➤ In strategizing risk communication, background studies such as focus groups and consensus meetings are conducted;
 - Analyses of how information is communicated and received are regularly conducted;
 - Reference materials for risk assessment, as well as the assessment process itself, may not be accessible to the public; in order to ensure openness, information is made accessible on the web, and public comments are invited.

② Studies on risk communication techniques

- There is speculation that peoples' risk tolerance and the risk response are influenced by how the media communicate situations surrounding risk occurrence, and how the administration deals with the situations after the occurrence.
- Consumers prefer prompt reporting of well-coordinated information with specified sources. In addition, consumers want timely communication from scientific authorities (risk assessment experts) in cases of risk occurrence.

3 Evaluation of public meetings organized by the Food Safety Commission

- ➤ Presenter and panelists of public meetings should prepare a specific key message beforehand, be selective in providing appropriate information depending on participant concerns, and refrain from being antagonistic.
- It is important to improve the qualifications of public meetings coordinators.
- ➤ It is also important to be flexible in designing public meetings by clarifying objectives and targets.

4 Consumer perception surveys

- Very few consumers understand food safety risk assessment.
- Most consumers obtain their information on food safety from the media (newspapers, magazines, television, and radio).

(3) The current state of risk communication and advice for improvement

The expert perspectives and advice on the current state of food safety risk communication can be roughly divided into the following points: sharing of the information infrastructure; interactive information exchange; and efficiency of opinion/information exchange. Table 4 shows the

experts' notes and advice on each of these points.

With regard to sharing the information infrastructure, the experts suggested that there is a particular need to recognize and consider the difference in the perception of risk and safety between experts in specific fields and non-experts. While the role of the Food Safety Commission is risk assessment, the commission's risk communications often closely link risk assessment and management. For this reason, it was suggested that risk assessment and management cannot be clearly separated in discussions and studies. Above all, consumers would not accept that the food safety risk had been fully communicated unless an appropriate explanation was provided for how the results of the risk assessment process were reflected in the risk management measures. With regard to the efficiency of opinion/information exchange, some experts advised that care should be taken not only to communicate methods, but also to help improve consumer's ability to make appropriate decisions after receiving information.

Sharing and collaboration between risk evaluators and risk managers is also thought to be one of the factors in improving processes. In particular, in order for the Food Safety Commission to win the trust of other stakeholders as a risk assessment institution, it was suggested that the commission needs to maintain its independence, impartiality, and transparency. This needs to be achieved at the same time as exchanging information and coordinating changes with risk management institutions. Currently, among other proactive measures to communicate risk to the public, the Food Safety Commission holds public meetings, food safety monitoring meetings, maintains a web site, and sends e-mail newsletters to subscribers. However, some experts noted that it is also important to strengthen the organizational systems and train people in order to promote more efficient inter-government office collaboration and change.

In order for each expert committee to function better, some experts suggested that opportunities be created for information exchange and collaboration between the Risk Communication Expert Committee, the Planning Expert Committee, and the Emergency Response Expert Committee.

3. Implementation and issues of government risk communication since July 2003

The implementation of the government's risk communication with regard to food safety for each method, as well as the issues that arose in the discussions of the Risk Communication Expert Committee, are as follows:

(1) Various meetings and making material available to the public

Implementation

All meetings of the Food Safety Commission and expert committees, along with data, are in principle open to the public unless the commission or committee chair deems it necessary to close them to the public due to intellectual property or privacy issues.

In general, the minutes of meetings are added to the commission web site two to three weeks after meeting dates.

In addition, the Ministry of Health, Labour and Welfare holds public meetings of the Pharmaceutical Affairs and Food Sanitation Council's Food Sanitation Committee and panels, and make their data and minutes available to the public on its web site.

Also, the Ministry of Agriculture, Forestry and Fisheries holds public meetings of the Consumption and Safety Committee of the Council of Food, Agriculture, and Rural Area Policies and its panels, as well as the Agricultural Chemicals and Feed committees of the Agricultural Materials Council. Material and the minutes of these councils, committees, and panels are made available to the public on the ministry's web pages.

Issues

Currently, the contents of and material from all meetings of the Food Safety Commission and expert committees are, in principle, made available to the public, and the commission has received some positive public on this policy. However, some experts noted that making public of the contents of discussions makes it difficult in some cases to discuss sensitive issues relating to intellectual property, and that meeting participants sometimes feel that other stakeholders have unrealistic expectations and exert undue pressure. On the other hand, in many countries in the West, expert meetings are held with a clear understanding of "who is going to discuss what, when, and where," with many discussions closed to the public.

After considering the pros (e.g., anyone can witness ongoing discussions in real-time on the spot) and cons (e.g., unedited materials and minutes become available to the public, and therefore are difficult to understand because the gist and conclusions are not clearly enunciated) of public meetings, the experts also suggested that the Food Safety Commission should follow this model of only making the gist and conclusion of each meeting available to the public. They also suggested that the disadvantages of closed meetings (e.g., it is hard to find out how discussions led to the conclusions) in the light of the maintenance of the commission's trustworthiness need be considered. In addition, some experts suggested that certain parts of discussions be closed to the public in order to secure more neutral, impartial, deep, effective scientific debates.

Since June 2006, the Food Safety Commission has been issuing a weekly e-mail newsletter, entitled "The Food Safety Commission e-Magazine". One of the commission's tasks in the near future will be to secure transparency of discussion processes and outcomes so that interested parties can make statements freely. This will be achieved by building and utilizing a system – other than the e-mail newsletter – which is capable of disseminating information in a timely manner.

(2) Holding public meetings

Implementation

Since the Basic Law on Food Safety came into effect, a total of 229 public meetings have been held nationwide in collaboration between the Food Safety Commission, the Ministry of Health, Labour and Welfare, and the Ministry of Agriculture, Forestry and Fisheries by the end of June 2006. Of these, 55 meetings were held in Tokyo.

Several tens to several hundreds of people attended each meeting, and the total number of

participants was about 37,000.

With regard to popular meeting topics, 131 meetings dealt with bovine spongiform encephalopathy (BSE), 32 on measures against pesticide residues in food, 13 on imported food, 10 on fish consumption and methyl mercury, and 2 on genetically public meeting food, reflecting the deep interest of stakeholders' in food's influence on health, as well as risk management measures.

According to the surveys on the composition of meeting participants, conducted by the Food Safety Commission, 25 percent of the participants were consumers, another 25 percent were food industries, 32 percent were government officials, and 18 percent were other parties (such as researchers and media officials). With regard to age, 6 percent of the participants were under 30 years of age; 16 percent in their thirties; 29 percent in their forties; 31 percent in their fifties; and 18 percent over 60 years of age. With regard to gender, 68 percent were male, and 32 percent were female.

With regard to frequency of attendance of participants in the commission's BSE-related public meetings, 24 percent of those surveyed responded that they attended for the first time; while, in an increasing trend, 76 percent of the participants answered that they had attended such meetings previously.

With regard to publicizing public meetings, the organizers utilize ministry office press releases, web sites, e-mail newsletters, as well as government notices to concerned local governments and organizations. The results of the surveys indicate that few consumers apply to participate in the meetings themselves; instead, more consumers learn about the meetings in announcements from their companies and organizations.

Press statements announcing the meeting date were released from six days to 55 days before the meeting. The average was about 20 days prior to the date of the event. However, the period tended to be shorter when meetings were held concurrently during the opinion/information collection periods for assessment of proposals on the influence of food on health. Short notice also tended to be given for nationwide meetings, such as for the risk management measures taken against U.S. beef, because of the time needed for study and discussion by expert committees and preparation of venues.

A variety of formats have been tried for public meetings. These include: (1) if the primary purpose is to accurately communicate particular information, experts and government officials first offer explanations, and then they exchange opinions with the participants at the venue; (2) if there are a wide range of interpretations of the meeting topic, and if it is decided that the meeting would be more efficiently conducted by categorizing and summarizing issues, a panel discussion format is deemed be suitable; and (3) if issues and problems need to be sorted out, and a mutual understanding of stakeholders reached, a roundtable discussion is suitable.

In some cases, creative formats were introduced. For example, certain meeting events were held during the opinion/information collection period for public input on proposals for assessing results on risk assessment.

Issues

Information on public meetings with regard to what the issues are, positions and opinions of different stakeholders, and the current state of progress in discussions is provided to the public in a

timely fashion through media reports and other means. This in turn has made the meetings visible to stakeholders nationwide, and has served as a major reference point for individual decision-making.

However, the following issues have been raised with regard to the meetings as a risk communication opportunity for exchanging opinions and information, and for the consideration of such exchanges in government policy decisions.

- A Sometimes the meetings give the impression that they force the organizers' assessments and management processes on participants through the one-sided provision of information.
- B Sometimes if the message intended to be conveyed by the organizers is unclear with regard to its objectives and bigger-picture explanation, the exchange of opinions among participants ends up at cross purposes.
- C It is important for consumers, food industries, food producers, government officials, experts, and other stakeholders to gather in the same place at the same time. However, significant differences in knowledge and the level of interest exist among participants. There is also an issue of "indigestion" of meeting content and subsequent dissatisfaction. (Explanations to participants, handouts, and on-site discussions often cannot meet all the requests from a range of stakeholders and as a result, some participants feel that the material is too difficult to understand, while some others feel that they are not enough of a challenge.

A variety of creative solutions need to be implemented, such as handing out summaries and detailed versions of material, so that meeting participants can have a worthwhile exchange of opinions.

D The Food Safety Commission has held a number of public meetings with the primary purposes of fully communicating risk analysis, risk assessment paradigms, and risk assessment results to a range of stakeholders, and to exchange opinions. However, despite their achievements, meetings have not been generally popular among stakeholders because meeting objectives did not necessarily match communication methods, event methods, topic selection, handout materials, and meeting proceedings.

In order to promote worthwhile debates on risk assessment, one needs to have a certain level of expert knowledge. In addition, it is also necessary that stakeholders mutually acknowledge each others roles.

These problems need to be solved by finding risk communication methods that fit more closely with meeting objectives (in other words, communicating not only at public meetings but also in other media, as well as more narrowly focused targets and better selected topics).

E Although meetings are for the exchange of opinions on risk assessment, the participants often express opinions about risk management procedures which are likely to result from risk assessment. Risk evaluators are sometimes unable to respond to such comments. In order to

solve this problem, meeting objectives and purposes need to be clarified. Further, there should be debate on whether meetings ought to focus on risk assessment and exclude risk management, or to be able to respond to comments on both assessment and management.

F The panel discussion method, in which representatives from stakeholders, as well as academic experts, exchange ideas, is highly regarded for effectively establishing the issues. However, some participants have expressed dissatisfaction that insufficient time is allocated to participation from the floor. However, if the emphasis is on question and answers from the floor, the panel discussion may lack detail.

It is important to ensure that there is sufficient time for the exchange of views between panelists to ensure an effective panel discussion. In order to achieve this goal, panelists need to understand the positions of a range of stakeholders and to be able to communicate with them. However, meeting organizers have difficulty finding panelists with these skills.

G Depending on meeting topics, there can be substantial differences in the interests of stakeholders. In some cases, meetings end up becoming primarily a vehicle for disseminating government information and fail to allow for an adequate exchange of opinions. In other cases, when meetings on the same topic are held more than once, participants end up repeating the same viewpoint. In addition, panel discussions tend to sharpen conflicts between stakeholders. This was particularly true in the public meetings on the BSE problem. In large-scale public meetings held by the government, it is difficult to reach a consensus in the limited time available because of the wide range of opinions. Therefore, different methods of opinion exchange need to be implemented at a number of levels, including meetings with a limited number of participants organized in cooperation with local governments, concerned consumers, and industry organizations. It is suggested that the best solution would be a new method of opinion exchange based on an understanding of the opponent's opinions.

(3) Calling public opinions and information

Implementation

A total of 135 opinion/information collections have been conducted by the Food Safety Commission on assessment proposals on risk assessment and risk assessment guideline between July 2003 and June 2006. With regard to risk management measures at the Ministry of Health, Labour and Welfare, the Ministry of Agriculture, Forestry and Fisheries, and the Ministry of the Environment, a total of 154 opinion/information collections were conducted by the Ministry of Agriculture, Forestry and Fisheries between July 2003 and June 2006; during fiscal 2005, the Ministry of Health, Labour and Welfare conducted 23 such collection; and the Ministry of the Environment conducted one opinion/information collection in fiscal 2004. The methods for collection included e-mail, fax, and mail.

The Food Safety Commission collects and sorts the opinions and information and forwards them to the appropriate expert committees. If the amount of public input is small, expert

committees issue responses to all the opinions and information. If the number of opinions and amount information is large, similar questions are merged before being answered by expert committees. Following debate on the Q&A material, the Food Safety Commission assesses and makes a decision on the food's influence on human health. The Ministry of Health, Labour and Welfare and the Ministry of Agriculture, Forestry and Fisheries, make public their positions on public opinions and information, and the ministries risk management procedures, such as setting standards, are only taken after considering the public input.

Issues

Some people who submitted opinions and information noted the procedures for how submissions and subsequent debates actually influence risk assessment are difficult to understand. Specifically, submissions on what is supposed to be risk assessment sometimes include opinions and information on risk management. In those cases, the commission notified the submitters that their opinions had been forwarded to government risk management offices. In these situations, it would be worthwhile considering making provision for notification of risk management information from the risk assessment institution after a decision has been made on risk control measures. Implementation will require a clear division of labour between risk evaluators and managers.

(4) Exchange opinion/information with stakeholders (government, local government, food industries, consumers, media, and academics)

Implementation

The Food Safety Commission has held regular meetings between commissioners and consumers, local governments, food industries, media, and other stakeholders. In addition, the commission has organized meetings with prefectural, municipal, town, and village officials, as well as holding public meetings with other concerned organizers, and organized lecturers to give presentations to local governments.

The Ministry of Health, Labour and Welfare is constantly in touch with prefectures and government ordinance cities and exchanges information on responses to food poisoning incidents, introduction of food safety-related systems, and the promotion of other food sanitary administration. In addition, the ministry jointly organizes public meetings nationwide with local governments, and promotes the exchange of opinions and information in collaboration with local consumer organizations and the food industry.

The Ministry of Agriculture, Forestry and Fisheries holds the Regular Meeting with Consumers, as well as other public meetings with consumers and food industries. The regional agricultural administration offices and district agriculture offices also hold symposiums and seminars designed for local audiences in addition to visiting elementary and junior high schools to hold seminars and organizing lecturers.

Issues

According to a variety of surveys, most Japanese obtain their information on food safety from newspaper and broadcast sources. For this reason, it is important to provide stakeholders with accurate and appropriate information through the media and to engage in an adequate exchange of opinions with them. This in turn would prevent the flow of inadequate information about scientific assessment, actual management measures, and risk communication, which can lead to misunderstanding among the stakeholders.

In the near future, a range of trials should be considered on opinion exchange at a variety of levels with the cooperation of local governments, consumers, and concerned industry organizations.

(5) Publicizing information through web sites, e-mail newsletter, and printed matter

Implementation

Each ministry involved operate their own web sites that are updated daily. These sites allow immediate calling public opinions regarding risk assessment and risk management measures, as well as disseminating comprehensive information on a variety of events and helping to secure food safety. Significant progress has also been made on inter-linking web sites operated by different ministry offices.

The Food Safety Commission launched the "Food Safety Commission e-Mail" Magazine (FSC e-Mail Magazine) the first issue of its e-mail newsletter on June 2, 2006. Its major features include the results and summary of discussions at the Food Safety Commission, its expert committees, and public meetings. At the end of June 2006, there were 2,419 subscribers.

The Ministry of Agriculture, Forestry and Fisheries issues the "Food Safety Express", a daily e-mail newsletter, to communicate press releases by the ministry and related ministries, offices, and institutions, as well as to announce events, and for the gathering of opinions and information, by commissions, councils, and public meetings. The ministry has also set up a kid's corner on its web site, to offer easy-to-understand information on food and agriculture for children and their parents. At the end of June 2006, 15,202 people had subscribed to the newsletter.

With regard to printed materials, ministries involved regularly issue and distribute pamphlets to local governments, consumer organizations, and industries. However, the number of copies of this printed material is still limited. Requests for materials intended for children, senior citizens, and foreigners have increased.

In June 2006, the Food Safety Commission issued 70,000 copies of a pamphlet for children entitled "Let's Protect Food Safety with Our Scientific Eyes". In addition, the commission produced a DVD entitled, "Methyl Mercury that Concerns Us – How to Safely Consume Fish During Pregnancy," as a part of its comprehensive project for fiscal 2005 comprehensive project on ensuring food safety. A total of 2,000 copies of the DVD title were intended to communicate in an easy-to-understand way, using visual and audio effects, the results of the commission's assessment on the influence of food on the human body. It was distributed to institutions such as public health centers accessed by high-risk individuals, as well as to people who wanted a copy.

Issues

Despite regular improvements in the user-friendliness of the web sites of the relevant ministries, visitors continue to complain that the information that they are searching for is difficult to find, that they need help to interpret information, and that FAQ needs to be improved. The ease of use needs to be continually improved by responding to visitors' opinions. In addition, readability of texts in ministry and commission e-mail newsletters and printed matter – which have become more complex – needs to be checked by non-experts and non-stakeholders prior to release. The contents and announcement frequency should also be reviewed by observing recipient demographics and reactions. Further, some overseas stakeholders have requested announcement of the latest information regarding Japanese assessment and measures on ensuring food safety in foreign languages.

Since Japan is highly dependant on imported foods, it is important to communicate widely to stakeholders overseas Japan's food safety assessments and procedures. In the near future, more information should be offered in foreign languages and the commission's web site should be used to introduce overseas news on food safety to the Japanese.

(6) Responding the inquiries by telephone, fax, and e-mail inquiries

Implementation

The Food Safety Commission maintains within its secretariat a Food Safety Hotline with a full-time counselor to respond to inquiries by telephone, fax, and e-mail between 10 am and 5 pm on weekdays. Inquiries cover not only risk assessment, but also a wide range of issues concerning general food safety. With regard to inquiries regarding risk management, the counselor contacts the Ministry of Health, Labour and Welfare and the Ministry of Agriculture, Forestry and Fisheries in order to have them respond to the parties making these inquiries. A summary of each inquiry is reported to the Food Safety Commission and its Risk Communication Expert Committee. About 70 inquiries a month have been received recently. In addition, inquiries received by the Food Safety Hotline are sorted by topics and shown on the commission's web site.

Issues

The Food Safety Hotline is an important source of information for monitoring how the public views program implementation by the Food Safety Commission. For that reason, it is important to utilize the information on the commission's risk communication by summarizing yearly or half-yearly the inquiries and opinions received, and how the public is reacting to the information transmitted by the commission.

(7) Food safety monitoring

Implementation

Nationwide, the Food Safety Commission monitors food safety and receives reports from 470

Food Safety Monitors with a particular level of food safety knowledge. The commission also conducts surveys of these individuals. Their reports and the results of the surveys are regularly reported to the Food Safety Commission and the Risk Communication Expert Committee. In addition, opinion/information exchange occurs annually at regional Food Safety Monitors Meetings.

Issues

Currently, qualifications for Food Safety Monitors include completion of college courses relevant to food, certification of a qualification relevant to food, or work experience in administrative or commercial offices relevant to food. However, some people think that the qualifications should be less restrictive so that a wide range of consumers can apply to provide this service.

Monitoring people are happy to provide comments, and for that reason are expected to liaise between the Food Safety Commission and their regions to promote opinion/information exchange. They need to be even more effectively utilized and their opinions analyzed in detail so that their comments can be used in a variety of ways.

(8) Studies and research

Implementation

Since fiscal 2003, the Food Safety Commission has commissioned a private research institution to survey the current state of communication of food safety risk in major foreign countries as well as to analyze the so-called rumor damages, development of risk communication assessment methods, such as public meetings, and public perception surveys on the web.

Starting in fiscal 2005, the commission launched an open search for suitable professional studies in the risk communication field as a part of a research project on techniques for risk assessment.

Meanwhile, in fiscal 2003, the Ministry of Health, Labour and Welfare launched a "Study on the Future of Food Risk Communication for the Protection of Human Health" as a part of its Research Project for Ensuring Safety and Promoting Peace of Mind with Regard to Food, under welfare, labour, and science research projects. In this study, researchers are investigating the ideal communication methods to be employed by administrative institutions, as well as carrying out surveys and research on the public recognition of information, and the development of risk communication training programs.

Issues

To ensure that the results of these studies can be fully utilized, the results of government research projects on risk communication that are currently implemented, as well as the research of the Food Safety Commission, should be available at the appropriate time to the Risk Communication Expert Committee. In some cases, a meeting for public reporting may be considered.

(9) Collaboration with major foreign countries

Implementation

The Food Safety Commission has entrusted a private research institute to invite risk communication officers of food risk assessment institutions from the Netherlands and Canada to Japanese. These officers participated in the commission's workshops (for details, refer to the section on research project results). In addition, the commission obtains food safety information from overseas by collaborating with the food safety administrative offices of international agencies in major foreign countries. The information obtained is available to stakeholders on the commission's web site as a part of the comprehensive food safety information system.

Issues

Japan has only a brief history of risk communication in the field of food safety. In order to make improvements, Japan needs to expand collaborative projects with experienced major foreign countries. In addition, food safety perception tends to differ from nation to nation due to differences in food culture and systems.

Therefore, Japan, which is highly dependant on imported foods, needs to communicate proactively its food risk assessment and management procedures, as well as the views of stakeholders. It would also seem important to circulate among domestic stakeholders the food risk assessment and management procedures in major foreign countries, as well as the perspectives of concerned foreign parties, and then to exchange opinions and information with stakeholders in those countries.

(10) Implementation of dietary information

Implementation

After the Basic Law on "Shokuiku", food education took effect in July 2005, the Basic Plan for Promotion of Shokuiku, food education, enforced in March 2006, stipulated that communication about ensuring food safety was to become a major foundation in promoting "shokuiku", food education. The plan calls for the expansion of risk communication to help increase the public's basic knowledge of food safety.

Therefore, the Food Safety Commission, the Ministry of Health, Labour and Welfare, and the Ministry of Agriculture, Forestry and Fisheries began holding public meetings for this purpose. The meetings are making steady progress on how to best use risk communication to contribute to "Shokuiku", food education.

On June 5, 2006, a meeting entitled, "Food Risk Communication (Tokyo): How Risk Communication Can Contribute to "Shokuiku", food education" was held with about 200 participants.

Also, at the First National Convention on Promoting "Shokuiku", food education on June 24, 2006, organized by the Cabinet Office and the Osaka Prefectural Government, the Food Safety Commission opened a booth. A total of 10,200 people attended the convention, and the

commission booth promoted understanding of risk analysis methods to ensure food safety. The booth also introduced the role of the commission and asked booth visitors to respond to food perception questionnaires. This was the beginning of implementation of "shokuiku", food education by the commission and over 950 people responded to the questionnaire.

Issues

At a panel discussion at the "Food Risk Communication (Tokyo): How Risk Communication Can Make Contributions to "Shokuiku", food education" meeting on June 5, 2006, panelists pointed out that important basic information tends to be inaccurately communicated. It was suggested that the solution to this problem is not necessarily for the transmitter to make the information easier to understand, but to correctly explain the logic behind the assessment and risk management measures or to display specific figures and explain what the figures mean. In this way, the panelists noted that information provision methods need to be creative, and that the receiver need to have the ability and training to accurately interpret and use the information.

According to the responses to the questionnaire distributed at the First National Convention on the Promotion of "Shokuiku", food education on June 24, 2006, about 90 percent of the respondents were very or somewhat apprehensive about food safety (958 responses). However, somewhat less than 20 percent of the respondents had asked questions of or expressed opinions to food industries and government offices. These results point to the importance of full provision of information regarding food safety in the process of "shokuiku", food education.

4. Directions for improvement

(1) Overview

Improvements should include not only collaboration between risk assessors and risk managers, but also the clear recognition of food risks by all parties involved, including governments, consumers, industries, and food growers, so that they can understand each other's positions and views and come up with appropriate directions for the immediate future. In order to achieve this goal, we seek to further improve the current state of risk communication, as follows:

- ① Improve sharing of the information infrastructure between stakeholders
- ② Improve interactive opinion/information exchange
- ③ Improve efficiency of opinion/information exchange

(2) Specifics

We think that the following measures are feasible and can be implemented immediately:

- ① Sharing of the information infrastructure among stakeholders
 - A Implementation of more focused public meetings with regard to content and targets

The primary objective of the government's public meetings is to share information and establish trust among stakeholders by exchanging information.

Currently, 100 to 300 parties concerned with food safety generally attend government public meetings. This format will continue in the near future, but for even more worthwhile opinion exchange, the methods of conducting the meetings need to be fine-tuned. Specifically, depending on the meeting objectives, the quality and quantity of exchanged information, the interests of the stakeholders, the region, the targets, and the number of participants can be narrowed down. This fine-tuning should be implemented through cooperation with local governments, industry organizations, and consumer organizations.

B Development of communication tools

In order to carry out worthwhile risk communication, it is important to provide information that make it easier for the public to understand scientific discussions. The material currently offered to the public does not necessarily fulfill this requirement. In preparing materials, the scope should be narrowed down while maintaining clarity and accuracy.

C Development of risk communicators

The objectives, and the messages to be communicated to the audience should be confirmed, and any major differences in viewpoints in the audience established beforehand in order to implement effective public meetings. This requires the training of risk communicators who are able to communicate effectively with each other and mediate between consumers, industries, experts, and other stakeholders to enable them to understand the positions and ideas of other parties regarding food risk.

Specifically, implementation of risk analysis training, such as role plays involving consumers, industries, and other stakeholders, should be considered.

D Improved information availability to the public

The current style of meeting minutes, which faithfully records everything said, take a lot of time to prepare and make public, and thus cannot satisfy the requirements of stakeholders for rapid dissemination of the information in the minutes. Therefore, the commission needs to try to release the point and summary of discussions in a clear and timely manner. However, despite this timing problem, consideration should be given to maintaining the current style of minutes as some people want to check detailed statements made in meetings.

② Ensuring interactivity of opinions/information exchange

A Communication and reflection on the gathering of opinion/information and the review process

Sufficient provision of information should be implemented through web sites and other means in the calling public opinions so that the review process becomes transparent.

In addition, it should be made clear how the public input is reflected in policy making.

When similar opinions are condensed into one opinion, the actual number of similar opinions should be clearly stated.

B Implementation of media coverage surveys (analysis of media coverage and their influences)

In order to implement interactive exchange of opinions and information, it is important to gather and analyze media coverage of similar information in newspapers and broadcasts of risk assessment results. This also extends to how stakeholders receive media coverage, and how they act on the media reports. This in turn, would be useful for information announcement in the near future. For this purpose, surveys of media coverage should be implemented so that media reports and their influences can be analyzed. Further, survey results should be actively utilized in making the results of risk assessment available to the media.

C Utilization of panel discussions

The panel discussion method has been criticized because it does not leave sufficient time for participation from the floor. However, in large-scale public meetings, interactive exchange of opinions and information is often very difficult with a large number of participants due to time constraints. Therefore, creative methods would be effective in promoting mutual understanding among stakeholders and staying within the set time when participants have conflicting views. These methods would include a thorough debate between panelists with different positions, and when necessary, allowing the same panelists to discuss the same topics in different meetings.

③ Improving efficiency of opinion/information exchange

A Implementation of media training

Most people rely on the media to obtain their information. For this reason, it is important for information transmitters to provide clear and accurate explanations. Therefore, to improve the provision of information to the media, it is necessary to consider implementing media training for Food Safety commissioners and administrative employees who are in charge of risk management procedures.

B Implementation of focus group interviews

Focus group interviews are implemented with a limited number of about 10 persons. This makes it easier to establish how the target audience perceives risk. It is widely used in the West as an effective means of obtaining background information for policy implementation.

This method is also believed to be effective in finding out the opinions and views of people who tend to be reticent. The Food Safety Commission will evaluate the effectiveness of introducing focus group interviews as a food risk communication method. After taking the results of the evaluation into account, the commission ought to consider the introduction of focus group interviews to obtain background information for implementing risk

communication.

C Development of risk communication evaluation methods

Methods of appropriately assessing the effectiveness of risk communication – such as sharing of the information infrastructure, interactive exchange of opinions/information, and communication effectiveness – should be developed so that risk communication can be steadily improved. To improve risk communication, the results of studies and research should be reported to the Risk Communication Expert Committee.

5. Issues to be considered in the near future

We have shown ways of resolving the issues that arose in the previous implementation of risk communication, as well as discussions at the Risk Communication Expert Committee. Major issues to be considered for improvement include:

(1) Verification of risk communication

The contents of public meeting discussions and the results of participant surveys have been reported at the meetings of the Risk Communication Expert Committee. On the other hand, in order to turn the achievements in the meetings into effective proposals for risk communication in the near future, the contents, achievements, and lessons of the actual implementation of public meetings should be closely examined. In addition, survey results have been reported to the meetings of the Risk Communication Expert Committee at appropriate times for discussions on improvements. However, the suitability of survey objectives and the response to survey participant requests ought to be reviewed. There is also a need for analysis of survey themes, survey methods, and participant identities, as well as the degree of survey participant's satisfaction and the achievement of survey objectives with regard to how the media reports these survey results.

Also, opinions and questions collected at the Food Safety Hotline need to be collated and sorted in order to improve risk communication.

(2) Securing transparency of the discussion process and improving information provision methods

After realizing that a risk assessment institution needs to maintain transparency and independence, the Food Safety Commission needs to study in the near future the pros and cons of making its discussions and detailed minutes available to the public, as well as the potential advantages and disadvantages of publicizing discussion summaries, and the disadvantages of closing commission discussions to the public. The maintenance of the commission's trustworthiness in the eyes of stakeholders, as well as effective discussion/debate methods, also needs to be considered.

(3) Cooperation with local governments

Effective methods and mechanisms to support local government risk communication, such as communication of local government needs and central government information, should be studied

in collaboration with local governments.

(4) Collaboration with foreign counterparts

Food risk perception and communication methods of experts and governments in foreign countries, where diet and lifestyle differ from those in Japan, should be analyzed. At the same time as considering how risk communication information from overseas can be disseminated, information on Japanese risk communication ought to be transmitted to foreign countries.

(5) "Shokuiku", food education

"Shokuiku", food education is being considered in school curricula because schools are viewed as an ideal site for such education. The Food Safety Commission needs to provide information and approach teachers so that teaching materials include accurate information on food safety.

6. Conclusion

- (1) This report was compiled three years after the reform of food safety administration. During this period, issues in the government's implementation of risk communication were distilled down to three points for making improvements: (1) sharing of the information infrastructure between stakeholders; (2) ensuring interactive communication in exchange of opinions and information; and, (3) improving the effectiveness of the exchange of opinions/information. We pointed out specific practical solutions for making improvements. Further studies need to be conducted and solutions reviewed whenever necessary for those issues for which solutions are hard to come up with.
- (2) The government's risk communication should be improved accordingly following the findings in this report. In order to achieve this, human resources as well as organizations and systems need to be improved.
- (3) In addition, all stakeholders should fully understand the purposes of risk communication, and make efforts to actively and constructively participate in food safety risk communication.

Presentations made to date and discussions held at the Risk Communication Expert Committee

Presenters	Matters reported or indicated	Content of discussions (future direction to follow in risk communication, etc.)
	•It is of vital importance to summarize and focus information.	•Consideration of methods to summarize information for greater clarity while still communicating the essentials.
Mr. Kunimitsu Takuma, Chief Producer of NHK Program Production Bureau's "News for Kids Weekly" (July	•It is important is to rewrite and revise as often as necessary until you are satisfied with the information you intend to communicate.	•Expertise and skills are necessary to clearly and quickly communicate specialized information (no longer than 7 minutes).
4, 2005).	•It is important to aim communication of information at a well-defined target o people.	•Also important to communicate the intended information beforehand to those with no previous knowledge of the subject in question to assess the effect of your communication.
	•It is important to do away with food	•Development of media literacy.
Dr. Kuniko	faddism. •It is important to share information among all stakeholders.	•Determine a method for communicating good, reliable information.
Takahashi, Faculty of Education, Gunma University (August 1, 2005).	•Although not yet verified, the degree of the hazard of a food containing harmful ingredients seems to depend upon the amount consumed.	· ·
		•Importance should be given to education on food safety and opportunities for "food education" at school.
	•We attempt to appeal to customers "communicating what customers want to know," without any intention of holding back negative information.	_
Ms. Yasuko Kondo, Senior Specialist at	•We should develop our risk-finding ability.	•It is necessary to strengthen consumers' ability to make judgments about information.
Dept. of Customer Communication, Suntory Limited (August 31, 2005).	•We should make data public as soon as, as widely as, and in words as clear as possible.	•It is necessary for scientists and specialists to take into account the viewpoints of everyday life.

	•It is recommended to properly plan the scale, select the place, and define the people to target for risk communication to create opportunities to directly contact the general consumer.	•Not all risk communication should be performed by the state alone; collaboration should be sought with consumer centers, community centers, university campus festivals, etc.
	•At Skylark we ensure product safety through the use of purchase control regulations and quantitative control of food sanitation.	•Building a healthy tension between business owners and consumers.
Mr. Kuniaki Mimaki, Manager of Comprehensive Group Quality Assurance Dept.,	•We should be aware that food sanitation problems are likely to occur. Based on this awareness, we should have in place the necessary measures to ensure help for victims, prevent the problems from expanding, determine the causes of the problems and ways to ensure their prevention.	•It is also important to consider the differences in safety standards, etc. between Japan and other countries.
Skylark Co., Ltd. (August 31, 2005).	•Unfortunately it is difficult to examine every stakeholder's opinion if the opinion involves the stakeholder's own interests.	•I recommend that businesses utilize the websites operated by consumer organizations.
	•I request that the state discloses to us food-related problems that are likely to occur in the future, draw up guidelines, and outline its underlying approach to food problems.	

Ms. Yuriko Inubushi, Vice President of Consumption Science Federation (September 13, 2005).	 Consumers will feel increasingly uneasy if only provided with negative information without detailed explanations. Discussions based on a full disclosure of the thinking of all stakeholders will convince consumers. Education is necessary to develop the ability to judge without irrational thinking based on half truths. 	 •We should analyze the factors that increase uneasiness and then take appropriate action. •It is important for "food education" to aim at developing students' ability to make judgments about risks. It will be necessary to collaborate with homemaking courses in schools. •Business owners should further promote the groundswell of treating consumers' input as valuable information for their own businesses rather treating it as complaints.
Ms. Toshiko Kanda, Secretary General of SHODANREN (National Liaison Committee of Consumers' Organizations) (September 13, 2005).	 It is necessary to involve stakeholders in the policymaking process. It is not clear how consumers' opinions are reflected in policy making. We require that supporting data, grounds, and reasons for communicated information be provided. It is important to enhance "consumer power." We would request information and methods of risk communication that help develop our ability to choose and judge. (Food education.) It is important to provide information on each "eating" occasion. (Food education.) 	 Participation in risk communication. Education that considers real-life situations is necessary. It is important to clearly communicate the risks and benefits of eating fish to consumers, as was the case with the methyl mercury incident last year.
Mr. Toshihiko Shinkura, Managing Director of ZENGYOREN (National Federation of Fisheries Co- operative Associations) (September 27, 2005).	 In the Japanese fishing industry, the market has changed from a sellers' market to buyers' market, which has also changed the way of thinking about quality control and sanitation control. It is important to publish accurate information as soon as possible and to communicate definite improvements. Also the fisheries industry should thoroughly analyze the risk communication carried out last year with regard to the methyl mercury incident. 	 A system is necessary that hears and responds to the requirements of "buyers" and "consumers." It is important for producers to have a method of providing information. It is necessary to consider the effect of the so-called "harmful rumors" and their prevention.

	•The relationship between producers	• It is important for producers, consumers,
	and agricultural cooperatives is	and distributors to discuss and consider the
	becoming closer with a greater exchange	acceptable level of unintended substances.
	of information and ideas. Also farmers	
	are increasingly aware of the importance	
	of documenting farming practices.	
	•It is necessary to promote food	
	education as a national movement.	
	(Food education)	
Mr. Eiii Mandan	• There should be no difference in the	
Mr. Eiji Monden,	desire for risk communication between	
Farmer (September	prefectural and municipal governments.	
27, 2005).	(Food education)	
	• We should make use of elderly people's	5
	wisdom. (Food education)	
	• It is important to recognize the "five-	
	step health process" (first, the soil	
	becomes healthy, which will make	
	agriculture healthy; then food becomes	
	healthy, which will make people healthy	,
	and finally the country will become	

Mr. Seiichi Ogawa, Director of Food Supervision and Guidance Division, Office of Health and Safety, Bureau of Social Welfare and Public Health, Tokyo Metropolitan Government (TMG) (October 17, 2005).	*Local governments need to work in close cooperation with local business owners and residents. TMG operates the Committee for the Assessment of Information on Food Safety, the Citizens' Forum for Food Safety, and related websites. *TMG has a system in place for reporting voluntary recalls that meets the requirements of Tokyo'sgigantic consuming centers. *It is important to communicate information to consumers in a clear, unambiguous manner using visual methods. *The state should develop personnel who are capable of grasping the whole picture strategically right from the planning stage and foreseeing the likely outcomes. *The state should seek collaboration with local governments such as the joint organization of meetings for the exchange of ideas. *The state should regularly assess and publish the results of how risk communication is received by the public	•It is important to provide information to municipal governments that are in frequent direct contact with residents, and train personnel to take charge of risk communication to such governments. •The state should consider the possibility of risk communication using the Internet such as TMG's Net Forum. •We should consider dividing the functions relating to the provision of information to all stakeholder between the national government and local governments.
	•We set up the Kumamoto Prefectural Conference on Food Safety Procedures to strengthen inter-bureau, inter- departmental collaboration. We operate the Kumamoto Prefectural Resident Conference on Food Safety.	•The state should support the development of communication tools that suit each region.
Mr. Masaki Naruo, Deputy Director of	•We have devised and put in place efficient communication tools such as Q&A Sessions and Food Education Drills.	•A mechanism is necessary to circulate information picked up from presentations at the prefectural resident conference or any other events that needs to be communicated to the state or other prefectures.
Food Safety and Consumer Life Division, Environment and Life Dept., Kumamoto Prefectural Government (October 17, 2005).	•The prefecture communicates regional or local information directly to all municipalities via the Intermunicipality Network on Food Safety and Security. We also organize area-based forums.	•The state should also consider collecting and publicly disseminating information on how opinions presented in each region are reflected in the region's policies.

	•We promote communication and the sharing of information between prefectures via the Food Safety and Security Administration Network in Kyushu and Yamaguchi Area.	
	•We are in the process of implementing a system for inspection and prompt publication of results in preparation for the positive list system due to come into force in the near future.	
	know or do not know, or how great their	•Communication planning requires the collection of basic data and information through social surveys such as questionnaires and focus group interviews.
	•Consumers are generally aware that food poses a lower risk than other technologies, but they can also be very sensitive to information on benefits.	•I suggest that the public awareness of information provided by the national government be checked before and after the information is released.
Dr. Toshiko Kikkawa, Associate Professor, Faculty of Business and Commerce, Keio University (March 20, 2006).	•It is important is to summarize and focus information. Limited communication of information may prevent people who should be informed from receiving the necessary information. It may also give rise to unexpected results.	
	• There are sometimes discrepancies in the communication of uncertainties regarding risk with respect to the scope of quantifiable risk. Risks that are not quantifiable are dealt with more broadly	
	•While risk communication should be made in a scientific manner, it may not be free of political or social judgment.	
Dr. Momoko Chiba,	•Consumption of food obtained from the wild may damage health (e.g., Minamata disease and itai-itai disease).	Implementation of measures aimed at food safety and health require improvement not only of the food itself but also a wide range of things such as the environment and nutrition.

Assistant Professor, Dept. of Public Health, Juntendo University School of Medicine (March 20, 2006).	or "food safety" is likely to lead the general public to imagine that a harmful	•I suggest that efforts be made to ensure that information provided by the state is communicated to the general public in an attention-grabbing manner (particularly in comparison with advertisements that emphasize advantages).
Mr. Masami Nakamura, Editorial Staff of Science and Technology Dept., Nihon Keizai Shimbun (March 20, 2006).	 The requirements for communicating information are the facts, timing, and specific methods. If any one of the three factors proves to be inadequate, then the other two will also turn out to be ineffective. For effective communication it is important that the information is transparent, fair, and easily accessible. Accessibility is especially important. It is necessary to rigorously determine if a given statement or piece of information is of a personal nature or of a more general scientific nature. We should not think that "citizens at large are unable to understand scientific information." It is important that we accurately communication such information. In identifying and explaining a risk it is important to make the risk "explicable to family members." The risk awareness of specialists and nonspecialists is different (a specialist considers a risk in terms of probability and tends to underestimate it while a 	criteria and can find the necessary information required for such a choice when they need it •There seem to be differences between the way of thinking of the media, specialists, and the general public. I suggest that opportunities be provided to check these differences, by comparing and analyzing, for instance, how information is communicated by the media and how consumers react to it.
	nonspecialist tends to consider the risk focusing on him- or herself). • Included in risk prevention measures are safety measures that take into account the uncertainty of science (health protection measures) and protection measures that concern the	•The risk awareness of specialists and nonspecialists is different. I am afraid such differences give rise to doubts and mistrust.

- Each human being is endowed with an | Depending upon the circumstances, instinct to escape danger based on their people apply different values in assessing decision as whether a thing is benign or the same risk, and often end up discussing harmful, and their reason for assessing the uncertainty of scientific reasoning. risks; however, they tend to believe what is said by a trustworthy person or people in general, and especially the media, rather than making their own judgment. • We are more likely to take a risk when •It is important for a consumer to be selfit is familiar to us, advantageous to us, reliant. or is managed by a person we trust. •For food safety it is important to • What is the role played by consumer balance an individual's wish for zero organizations? Dr. Hideaki Karaki, risk (an ideal) and the regulations that Emeritus Professor, University of Tokyo are applied by society to risk taking (a practical approach). (April 25, 2006). • It is important that a trustworthy person (or an organization) communicates accurate information to close the gap between the ideal and the real and reduce uneasiness. Being optimistic, I hope that consumer organizations will reach a compromise between the ideal and the real. Any involvement in food safety should be carried out from the viewpoint of "one who shares the same interests," not from that of a "stakeholder." • Science is useful as an objective criterion for a fruitful discussion. Feelings or morals differ sharply from one person to another and cannot serve as a criterion. • It is important to improve •I wonder if it is necessary to make public communication between "risk managers the whole process of communication and risk assessors," "risk assessors and between risk assessors and risk managers. consumers," and "risk managers and It is important to publish the results of consumers."
 - It is difficult to describe the results of risk assessment, especially how the quantitative concept is treated.
- such communication.
- •I wonder if it is necessary to include the concept of cost, benefit, and performance in scientific risk assessment.

Dr. Shigeki
Yamamoto, Manager
of Division of
Biomedical Food
Research, National
Institute of Health
Sciences (April 25,
2006).

- It appears to me that an adequate mechanism is not in place for the efficient exchange of information, including information collected from consumers and industries that affects risk assessment.
- Verification of the effect of risk management is also important.
- Performing risk communication requires exchange of information with stakeholders. I wonder if it is sensible to carry out such information exchange with all stakeholders in the same place and style.
- In risk communication it is necessary to consider the content of the information to be communicated (the effect of the risk management measures and the results of risk assessment) as well as the timing and scale of such communication.
- •Communication of information also requires a technique for translating technical terms into general terms.
- •Risk assessors or risk managers coordinating different ministries and agencies are as necessary as the systems that allow such coordination.

- •I fear that a division of the role of risk assessment and risk management will lead to a greater communication barrier and give rise to different intentions and misunderstandings.
- •Risk assessment may require collaboration with and data collection by risk management agencies. Such collaborative communication should be made more public.
- In the event that measures taken in Japan are different from those implemented in other countries, I wonder whether it is more appropriate to assess the equivalence of risk management or the equivalence of the safety of the food itself.

Training provided on risk communication at the Ministry of Health, Welfare and Labour (MHWL), and the Ministry of Agriculture, Forestry and Fisheries (MAFF)

<*MHWL* >

O In fiscal 2005

Training and other programs	When provided	Purpose and content of training	Lecturers
Conference "Research on how to promote food-related risk communication aimed at health protection" (a health, welfare, and labour science research project) organized by Study Group.		Training programs for risk communication provided under the direction of invited foreign lecturers (with the participation of staff members of related offices and ministries).	Mr. Erik. K. Stern and Mr. Edward C. Deverell, National Center for Crisis Management Research and Training, Swedish National Defence College.
Training in risk communication at Food Sanitation Management Course at the National Institute of Public	February	Two-day training was provided to food sanitation inspectors of local governments.	Chie Kanagawa, Professor at Koshien University, and some others.

<MAFF>

O In Fiscal 2003 (July onward)

Training and other programs	When provided	Purpose and content of training	Lecturers
Training in economic planning: Introduction to risk communication.	July	Participants, including deputy directors of divisions at the Food Safety and Consumer Affairs Bureau, learned about the basic concept of risk communication. By way of a trial, participants also drafted and presented a press release at a news conference (lecture	Tomio Kinoshita, President of Koshien University, and four other lecturers.
Seminar for executive members of the Food Safety and Consumer Affairs Bureau.	August	Directors-general and division/office directors were given a general lecture on the things to look out for and keep in mind. They also exchanged ideas on what should be done by the state (lecture & exchange of ideas).	Tomio Kinoshita, President of Koshien University.
Seminar for executive members of the Food Safety and Consumer Affairs Bureau.		Directors-general and division/office directors exchanged ideas on the things to look out for and keep in mind based on FDA reports (lecture & exchange of ideas).	General Coordinator of Food Safety and Consumer Affairs Bureau.

Seminar for deputy directors of divisions at the Food Safety and Consumer Affairs Bureau.	September	Deputy directors of divisions learned about the basic concepts, the things to keep in mind, and the preparation of easy-to-understand materials (lecture).	Dr. Taketoshi Taniguchi, Director, and Ms. Tomoko Tsuchiya, Senior Researcher, Central Research Institute of Electric Power Industry.
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O In Fiscal 2004

Training and other programs.	When provided	Purpose and content of training	Lecturers
Seminar on risk communication.	April	Lecture provided to staff transferred to Food Safety and Consumer Affairs Bureau on the basic concept of risk analysis and the things to keep in mind with regard to risk communication.	General Coordinator of Food Safety and Consumer Affairs Bureau.
Training for executive staff members of the Food Safety and Consumer Affairs Bureau.	July	Lecture provided to executive staff members transferred to Food Safety and Consumer Affairs Bureau on the basic concept of risk analysis and the things to keep in mind with regard to risk	General Coordinator of Food Safety and Consumer Affairs Bureau.
Basic training on Food Safety and Consumer Affairs Bureau.	May, Sept., Oct., and Nov.	Lecture provided to staff members of Regional Agricultural Administration Offices and District Agriculture Offices on the basic concept of risk communication.	Staff members in charge at Food Safety and Consumer Affairs Bureau.
Workshop on risk communication.	May, June, December, and March	Staff members of Regional Agricultural Administration Offices and District Agriculture Offices first observed risk communication at the MAFF head office and then were given a lecture on the basic concept of risk analysis and the things to keep in mind concerning risk communication. They also exchanged ideas on these subjects.	General Coordinator of Food Safety and Consumer Affairs Bureau.
Training in economic planning: Introduction to risk communication.	January and February	Staff members at the MAFF head office were given a lecture on the basic concept of the three factors of risk analysis. They also practiced risk communication including drafting and presenting a press release at a news conference.	Tomio Kinoshita, President of Koshien University; Director of Food Safety and Consumer Policy Division.
Study meeting for newcomers to Food Safety and Consumer Affairs Bureau.	March	Lecture given to transferees to Food Safety and Consumer Affair Bureau on the basics of food safety and consumer affairs administration as well as the basic concept of risk communication and the things to keep in mind.	Staff members in charge at Food Safety and Consumer Affairs Bureau.

O In Fiscal 2005

O 111 1.04W1 2000			
Training and other programs	When provided	Purpose and content of training	Lecturers

Training in risk analysis provided to staff members of local governments (planned by MAFF, and conducted jointly by MAFF and MHLW).	June	Training provided to staff members of local governments on risk analysis.	Director of Food Safety and Consumer Policy Division (MAFF); Counselor for Minister's Secretariat (MHLW) (in charge of medicine and food), and some others.
Training for staff members in charge of Food Safety and Consumer Affairs Administration.	June, Sept., Oct., and Nov.	Lecture given to staff members of the Regional Agricultural Administration Offices and District Agriculture Offices on the basics of food safety administration.	Staff members in charge at Food Safety and Consumer Affairs Bureau.
Study meeting on risk analysis.	April	Lecture given to transferees to the Food Safety and Consumer Affairs Bureau on the basic concept of risk analysis and the things to keep in mind concerning risk communication.	Director of Food Safety and Consumer Policy Division.
Scientific seminar on food safety.	December	One of nine seminars was on the theme "risk communication." Explanations were given about risk communication addressed by MAFF as well as a lecture on how information should be provided from the viewpoint of a consumer.	Masae Wada, Senior Counselor of Shufuren (Housewives' Association); Staff member in charge at Food Safety and Consumer Affairs Division.

	h on risk communication performed in foreign countries				
(1) Hearing	(1) Hearing survey conducted in foreign countries				
Content	Hearing surveys conducted on consumer organizations in Europe (the Netherlands, Belgium, Germany and the U.K.) to find out how they are organized and prepared to address risk communication.				
	• There are some organizations with a substantial capacity for policy analysis and scientific expertise, which participate in policymaking for, and planning of, risk communication in cooperation with administrative agencies.				
Results	• These organizations provide a wide variety of staff training programs to enhance risk recognition by consumers.				
	•There is a tendency for the interest in food to be shifting from "safety" to "nutrition and healthiness."				
(2) Interna	tional workshops organized by those in charge of risk communication				
Content	People in charge of risk communication organized an international workshop and invited experts from Canada and the Netherlands with practical experience in risk communication to exchange opinions on the current situation and problems relating to risk communication about food safety in different countries.				
	Emphasis was placed on the need to communicate risk to well-focused targets.				
	Consumers now find themselves in a position of expressing opinions rather than criticizing.				
	Participants pointed out the usefulness of focus group meetings and consensus building in drawing up risk communication strategies.				
Results	• Consumers' tolerance of risk levels differs from one hazard to another. For risks with low-tolerance levels importance should be given to listening to opinions.				
	Participants pointed out the usefulness of developing communicators skills, media training, and surveying media coverage.				
	Some questioned if "publicizing a risk " always serves to secure "transparency."				

2 G					
2. Survey	on techniques of risk communication				
Content	 Quantification of the social impact of avian flu and an analysis of media coverage (reports by the mass media and their influence) by a survey on the "determination of the cause of harmful rumors about foods and their prevention." A focus group survey on the "assessment of food-related risk communication and measurement and judgment of the effect of such communication." 				
Results	• An inference was made about the impact on chicken consumption of the dissemination of information by the media about how the avian flu risk arose in different places and how it was dealt with by the administration and those who created the risk.				
	• The survey suggested that consumers want prompt reporting of consistent information derived from an identifiable source and, if the need should arise, for the risk to be communicated by scientists (experts on risk assessment).				

3. Evaluat	ion of the meetings organized by Food Safety Committee for the exchange of opinions
	Establishment of a committee to evaluate the exchange of opinions at meetings and review the items from the viewpoint of risk communication.
Content	• The committee should evaluate the exchange of opinions at the meetings and prepare recommendations for improving the procedures for holding the meetings.
	• It is necessary for lecturers and panelists invited for such meetings to determine the key message beforehand, sort out appropriate information based on the presumed interests of the participants, and address them [in a nonconfrontational manner] [bearing a placid expression].
Results	• It is important to have a well qualified coordinator of the meetings to better facilitate the exchange of opinions.
	•There should be flexibility in the type of meeting held for the exchange of opinions but the meetings should have a clearly defined content and target.

4. Survey o	4. Survey on consumer perception			
Content	Surveys were conducted over the Internet on issues of high national interest with specific themes whose impact on health was assessed in order to quickly and accurately grasp the consumers' perception of food risks and the effect of risk communication.			
Results	The survey results suggest that few consumers are aware of risk assessment and that consumers obtain the majority of their information on food safety from the mass media (newspapers, magazines, TV, and radio).			

Viewpoint	Presenter	Matters pointed out and advice given
		It is not clear how consumers' opinions are reflected in policy making.
	Ms. Kanda	It is necessary to involve stakeholders in the policymaking process.
		• Efficient communication cannot be carried out without knowing to what extent recipients are aware of, or interested in, the subjects at issue (communication is bound to fail if performed on an unreasonable presumption not supported by basic information).
	Dr. Kikkawa	It is of vital importance to summarize and focus information.
		• Limited communication of information may prevent certain people, who should really be informed, from receiving the necessary information. It may give rise to unexpected results.
	Dr.	• It appears to me that an adequate mechanism is not in place to efficiently exchange information, including that collected from consumers and industries, that has a bearing on risk assessment.
	Yamamoto	• It is important to widen communication between "risk managers and risk assessors," "risk assessors and consumers," and "risk managers and consumers."
Interactivity	Mr. Ogawa	The state should regularly assess how the public receives risk communications and publish the results of these assessments.
⁄ity	Mr. Nakamura	• If any of the three factors necessary for information communication — facts, timing, and method — proves to be inadequate, then the other two will also turn out to be ineffective.
		• Effective communication requires the information to be transparent, fair, and in particular, easily accessible.
	Mr.	Food education needs to be promoted nationally. (Food education.)
	Monden	Consumers need to have their involvement in participatory risk communication guaranteed.
		• It is important for producers, consumers, and distributors to discuss and consider the acceptable level of unintended substances.
		• A division between the role of risk assessment and risk management may lead to a "greater barrier to communication," giving rise to different intentions and misunderstandings.
		• Risk assessment, including data collection, may require collaboration with risk management agencies. Such collaborative communication should be made more public.
		It becomes difficult to examine each stakeholder's opinion if the opinion involves the stakeholder's own interests.
Sharii	Mr. Mimaki	
Sharing of information inf	Dr.	There are sometimes discrepancies in the communication of uncertainties regarding risks with respect to the scope of quantifiable risks. Risks that are not quantifiable are dealt with more broadly.
ation inf	Kikkawa	While made in a scientific manner, risk communication may not be free from political or social [influences][judgment].

Viewpoint	Presenter	Matters pointed out and advice given
ìrastrı		It is important to do away with food faddism.
rastructure	Dr. Takahashi	It is important to share information among all stakeholders.
		• Although not yet fully verified, the degree of hazard of a food containing harmful ingredients seems to depend upon the amount consumed.
		It is vital to summarize and focus information.
	Mr. Takuma	• It is important is to rewrite and revise information as often as necessary to ensure that it communicates the information intended.
		It is important to write information for and communicate it to a well-defined target of people.
		We require that supporting data, grounds, and reasons for communicated information be provided.
	Ms. Kanda	• We ask for information and methods of risk communication that help develop peoples' ability to choose and judge. (Food education.)
		• It is important to provide information on each "eating" occasion. (Food education.)
		• It is necessary to enhance "consumer power."
		• To prevent information from being misleading, it is necessary to rigorously determine if a given statement or piece of information is of a personal nature or of a more general scientific nature.
Sharing of information infrastructure		• It is important to accurately communicate scientific information because citizens at large are not able to understand such information.
	Mr. Nakamura	• An important requirement in identifying and explaining a risk is to make it "explicable to family members."
		• There is a difference between the risk awareness of a specialist and a nonspecialist (a specialist considers a risk in terms of probability and tends to underestimate it while a nonspecialist tends to consider the risk in a self-centered manner).
	Dr. Yamamoto	• It is difficult to describe the results of risk assessment, especially how the quantitative concept is treated.
		 Verification of the effect of risk management is also important. Consumption of food obtained from the wild can damage health (e.g., Minamata disease and itaiitai disease).
	Dr. Chiba	• "Assessment of the impact on health" or "food safety" is likely to lead the general public to imagine that a harmful substance is being assessed. Assessment of the impact of deficiencies of essential elements on health is a task that needs to be addressed in the future.
		Consumers will feel more uneasy if they are only provided (negative) information without detailed explanations.
	Ms. Inubushi	Discussions based on a full disclosure of the thinking of all stakeholders will convince consumers.
		• Education is necessary to develop the ability to judge without irrational thinking based on half

Viewpoint	Presenter	Matters pointed out and advice given
	Mr. Shinkura	It is important to publish accurate information as quickly as possible and communicate any definite improvements obtained.
	Mr. Ogawa	• The state should develop personnel with the capability of strategically grasping the whole picture right from the planning stage and foreseeing the likely outcomes.
		Development of media literacy.
		Think about methods of communicating accurate and reliable information.
		• It is necessary to improve consumers' understanding of quantitative concepts such as the dose-response relationship. (Risk literacy)
		 It is necessary to build a healthy tension between business owners and consumers. It is important to consider differences in safety standards, etc. that exist between Japan and other countries.
		Businesses should consider utilizing the websites operated by consumer organizations.
Sharing o	Discussions	• It is important to clearly communicate the risks and benefits of eating fish to consumers as was the case with the methyl mercury incident that occurred last year.
of inform		• It is necessary to consider the effect caused by the so-called "harmful rumors" and their prevention.
Sharing of information infrastructure		• It is important for "food education" to aim at developing students' ability to make judgments about risks. Collaboration with homemaking courses at schools is necessary.
		• We should analyze factors that "that increase uneasiness" and then take appropriate measures.
		 We should consider methods to explain the function performed by risk management and risk assessment. Education that deals with real-life matters is necessary.
		 A system is necessary to listen to and pick up the requirements of "buyers" and "consumers." A system is necessary to collect information from all parties concerned.
		 It is important to provide information to municipal governments that are in frequent direct contact with residents and develop personnel in charge of risk communication to such governments.
		• Communication planning requires collection of basic data and information (through social
Efficiency of exchange of opinions and info	Ms. Kondo	 surveys such as questionnaires and focus group interviews). We make every effort to appeal to customers by communicating "what customers want to know," without any intention of holding back negative information. We should develop our risk-finding ability.
		 We should make data public as soon as possible, as widely as possibly, and as clearly as possible.
		• It is recommendable to properly plan the scale, select the place, and define the target people for risk communication to maximize opportunities to be in direct touch with general consumers.
	Mr. Ogawa	• It is important to communicate information to consumers in a clear, unambiguous manner using visual methods.
		The state should seek collaboration with local governments such as the joint organization of meetings for the exchange of opinions.

Viewpoint	Presenter	Matters pointed out and advice given
ormation	Mr. Naruo	In Kumamoto Prefecture we have devised and put in place efficient communication tools such as Q&A Sessions and Food Education Drills.
Efficiency of exchange of opinions and information		• Enhancement of risk communication requires exchange of information with stakeholders. I wonder whether it is desirable to carry out such information exchange with all stakeholders in the same place and using the same style.
	Dr. Yamamoto	• For risk communication, it is necessary to consider the content of the information to be communicated (the effect of risk management procedures and the results of risk assessment) as well as the timing and scale of such communication.
		Communication of information also requires a technique for translating technical terms into general terms.
		• Risk assessors and risk managers who coordinate ministries and agencies are as necessary as the systems that allow such coordination.
		• Included in risk prevention measures are safety measures that take into account the uncertainty of science (health protection measures) and protection measures that concern the psychological domain (sales-oriented measures).
	Dr. Karaki	• Each human being is endowed with an instinct to escape danger based on their decision as to whether a thing is benign or harmful, and a reason for assessing risks. However, rather than making their own judgments, individuals tend to believe what is said to them by a trustworthy person or people in general, and especially by the media.
		• We are more likely to take a risk with something that is familiar to us, when it is advantageous to us, or if it is managed by a person we trust.
		• For food safety, it is important to balance an individual's wish for zero risk (an ideal) and the regulations applied by society to risk taking (a practical approach).
		• It is important that a trustworthy person (or an organization) communicates accurate information to close the gap between the ideal and reality and reduce uneasiness.
		• From an optimistic standpoint I expect consumer organizations will reach a compromise between
		• Any involvement in food safety should be carried out from the viewpoint of "one who shares the
		Science is useful basis for a fruitful discussion. Feelings or values differ sharply from one person

Viewpoint	Presenter	Matters pointed out and advice given
Effi		We should make clear the benefit of actually communicating "demerit information" in response to consumers' safety awareness.
		• Efforts are necessary to strengthen consumers' ability to make judgments about information.
		• It is necessary for scientists and specialists to have input from the viewpoint of everyday lives.
		• Not all risk communication should be performed by the state alone; collaboration should be sought with consumer centers, community centers, university campus festivals, etc.
		• Business owners should further promote the groundswell for dealing with consumer input as valuable information for their own business, and not treat it as mere complaints.
		• The state should consider the possibility of risk communication using the Internet such as TMG's Net Forum.
		• It is necessary to consider the role to be played by the state and local governments in providing information to stakeholders.
iency		• The state should support development of communication tools to suit each area.
of exchan		• A mechanism is necessary to circulate opinions or information presented at Prefectural Resident Conference or any other events that needs to be communicated to the state or other prefectures.
lge of c		• The state should consider collection of information on to how the opinions presented in each region
Efficiency of exchange of opinions and information		Consideration of methods for summarizing information for greater clarity while retaining the essence of the subject.
nd informa		• Expertise and skills are required to clearly and quickly communicate specialized information (no longer than 7 minutes).
ıtion		• It is also important is to communicate the intended information beforehand to people with no previous knowledge of the subject in question to assess the effect of your communication.
		• All relevant information should be made public so that each consumer can make a responsible choice on their own criteria and can find the information required to make such a choice when they need it.
		• There are differences between the ways of thinking of the media, specialists, and the general public . I suggest that opportunities be provided to check these differences (for instance, by checking on how information is communicated by the media and how consumers react to it).
		• I wonder if it is necessary to make public the whole process of communication between risk assessors and risk managers (it is important that the results of such communication be published).
		• I wonder if it is necessary to include the concepts of cost, benefit, and performance in scientific ri
		• There is a difference between the risk awareness of a specialist and a nonspecialist. I am afraid su

Viewpoint	Presenter	Matters pointed out and advice given
oint view Efficiency of exchange of opinions and information	Presenter	 Depending upon the circumstances, people apply different value judgments in assessing the same risk, and often end up discussing the uncertainty of scientific reasoning. What is necessary for a consumer to be self-reliant? What is the role played by a consumer organization? In the event that measures taken in Japan are different from those implemented in other countries, I wonder which is more appropriate to assess, the equivalence of risk management or the equivalence of the safety of the food itself?
		food itself, but also a wide range of things such the environment and nutrition. I suggest that efforts be made so that information provided by the state may be communicated to the general public in an attention-grabbing manner (particularly in comparison with advertisements that emphasize advantages). I suggest that the rate of awareness of the information provided by the national government be checked before and after it is released.