INTERACTIVE COMMUNICATION - A NEW MODEL OF COMMUNICATION ON RISKS IN FOOD

Antunović[1], B., R. Rubil[1], V. Poljak[2], V. Dobranić[3]

SUMMARY

Even small mistakes in communication on the risks in food can tarnish reputation and confidence in institutions included into the system of food safety or food producers, and inflicts damage to the effort which takes years to invest to earn consumers' confidence. In crisis situations, companies that produce food can find themselves overnight in a situation where they are expected to apologize, justify, explain the level of danger for consumers, etc. In that process, it is important even for the public institutions and food producers to understand the differences in perception of the public of certain risks in food, as well as to predict any possible reactions of the public. Including all the interested parties to a dialogue makes it easier for risk managers to evaluate the risk, to identify and balance between the possible options in risk management, as well as to implement and evaluate measures to be taken up, and it also reduces the loss of consumers' confidence to a food producer. This two- way system is called interactive communication on risks in food.

Key words: *communication of risks, food safety, interactive communication*

INTRODUCTION

Communication system on risks in food included implicitly that the science can ensure objective truth until the 90s of the last century, then that scientific and technical experts are the only possible source of correct information, whereas the public is a passive receiver of information. This system showed itself to be nontransparent and not understandable enough for wider public.

By giving one-side information, although scientifically based, observation of reflections and interests of other interested parties (consumers, producers, etc.) is missed. They often clash with exclusive scientific cognitions. Except for "translating" scientific truths to language understandable to the public, government institutions are also expected to include the interested parties to a dialogue ("interactive communication"). This method makes it easier for risk managers to evaluate the risk, to identify and balance between the possible options in risk management, as well as to implement and evaluate measures to be taken up, and it also reduces the loss of consumers' confidence to a food producer.

RISK – A SOCIAL CONSTRUCTION

Basic dimensions of risk are expert, profane and political dimensions. By developing analytical technologies, experts improve measuring instruments for detecting hazards and they give estimations which become even more precise. The public is often under informed about the aspects of risk and therefore asks independent experts for confirmation or reducing of their own fears. In the process, it is crucial in creating confidence that they are not in conflict of interests, i.e. that they aren't in contact with producer companies that generated the risk. This doesn't exclude the communication towards the public from such companies, as well as mutual communication of government institutions and companies related to the risk appearance. Even more, it plays an important part if it appears that producer companies gladly cooperate with government institutions in removing or reducing the risk, and insist on the protection of well-being and health of

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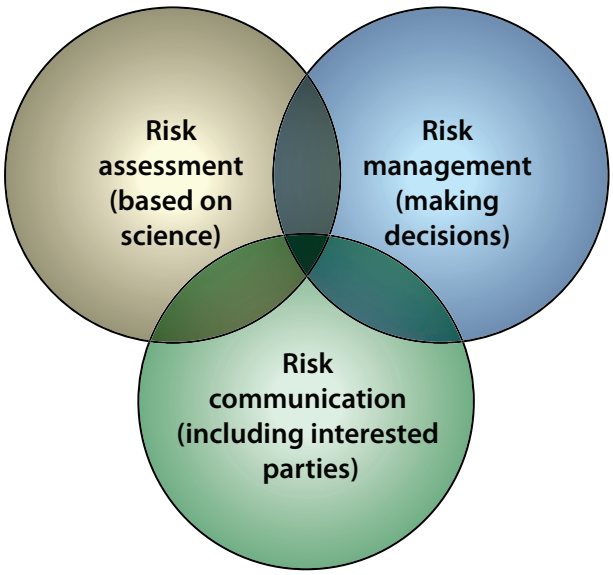
the people, even if it were to their damage. Taking a long-term view, such attitude is useful for food producers, and in the end it gives them an opportunity to restore consumers' confidence.

Structural definition of risk has become a usual part of everyday life of the modern society where the existence of risk is unquestionable, and risk systems are often out of reach of an individual regulation. Institutional frames of food safety systems are often perceived by the public as being abstract and by that they make way for the profane perception of risks in food. In the process, variables which affect the perception of risk are experiences, actual knowledge, prejudices, degree of empathy with the risk, character of initial experiences, knowledge of risk or its lack, possible damage caused by the risk, imagination or perception about the risk, assumptions on the effect of risk on life and health, socioeconomic status of an individual, etc.

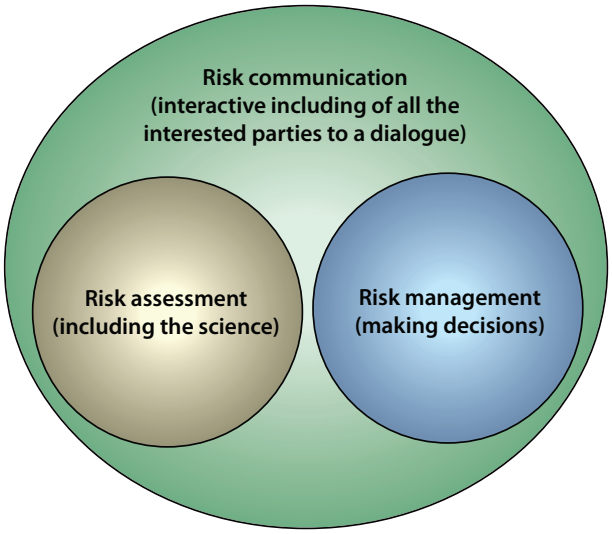
Political dimension of risk tries to determine several elements of risk, including the economic ones. In this dimension of risk, damages and benefits from publicizing some information connected to some risky situation are analyzed.

Civil societies of the 21st century have been trying to solve the problem in communication and undermined the confidence in the experts in the food safety field by establishing independent agencies with panels of independent scientists who take on the communication with participants of the process, and they give estimation and explanation of the risk.

▼ **Scheme 1.** The first organizational structure of food safety risk analysis (FAO/WHO, 1998)



▼ **Scheme 2.** New organizational structure of the food safety risk analysis (FAO/WHO, 2006)



DEVELOPMENT OF COMMUNICATION ON RISKS IN FOOD ON INTERNATIONAL LEVEL

Communication on the risks in food has developed in about last ten years into a special field as one of the three components of analysis of the risk in food (risk assessment, risk communication and risk management). Expert consultations in the field of carrying out communication of the risks in food in a joint organization of the World Health Organization (WHO) and Food and Agriculture Organization of the United Nations (FAO) in Rome (FAO/WHO, 1998), designated the beginning of a more responsible approach to communication of the risks in food in the international politics of food safety.

Information on a recent change in the food safety risk analysis scheme recommended by the *Codex Alimentarius* commission (CAC), supports the fact that communication of the risks in food is considered to be very significant nowadays. Whereas the first food safety risk analysis scheme was represented with three circles (risk assessment, risk communication and risk management) which mutually overlap in the middle (FAO/WHO, 1998; Scheme 1), the today's scheme consists of the two circles – risk assessment and risk management, which are encircled by the third circle – risk communication (FAO/WHO, 2006; Scheme 2).

The syntagm which has been used more and more lately is in favor of the increasing significance of the risks in frames of the food safety risk analysis while describing the new organizational structure of risks in food, according to which risk assessment and risk management "float in the sea of communication".

A NEW MODEL – "INTERACTIVE COMMUNICATION"

The concept of the interactive communication has appeared as an answer to many crises situations in the field of food safety in the world, when decisions were made by risk managers which were hard to accept or understand by the public, because of the lack of understanding or including the interested parties.

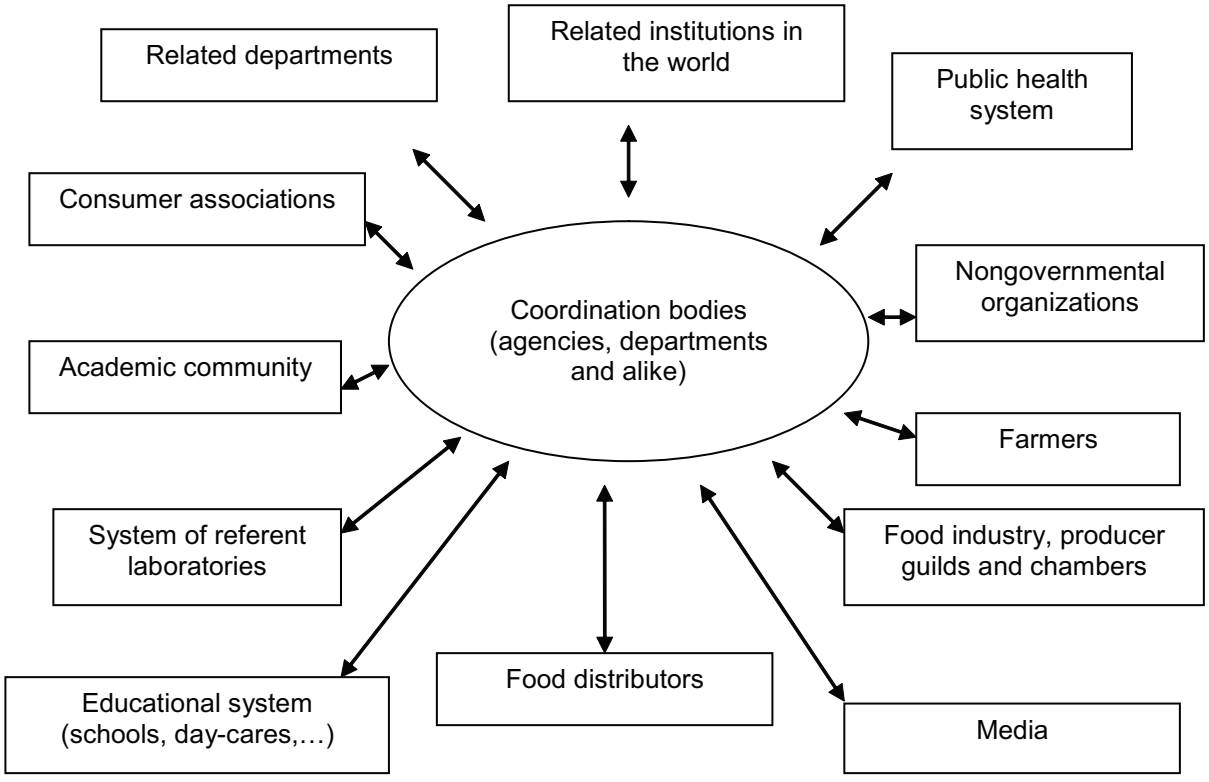
The alternative model – "interactive communication" includes the dialogue on the risks. In that process, everyone who is connected to the risk has the right to be included in a dialogue, and there has to be a democratic mechanism for free exchange of information between the risk assessors, risk managers, food producers and the public on the problems related to the risk and its possible solutions. The EU legislative (EC, 2002), and since not long ago the Croatian as well (National Gazette, 2007), is based on this new concept which presupposes introduction of the interactive communication of all the interested parties in the field of food safety (Scheme 3).

Empowering the concept of the communication of the risks in food in Croatia is necessary for the implementation of advanced principles of the EU legislative in practice (Antunović et al., 2006; Antunović et al., 2008).

SPECIFIC QUALITIES OF THE RISK PERCEPTION

Formulating a personal perception of risk can be affected by different factors which overcome the ability of a realistic perception based on scientific conceptions. Studies of the risk perception research factors which influence the public while making judgments in the sense of characterization and estimation of hazard activities or technologies (Slović, 1987). By the usual procedure of decision making by consumers (to eat – not to eat, to avoid – to prefer, etc.), food safety is considered to be a subject which can't be negotiated about, which means in concrete that consumers expect all the food to be safe (Frewer et al., 2005). Still, life is risky by itself (Wilson and Crounch, 2001), the absolute safety is unreachable, and scandals related to a report of unsafe food of larger proportions can result in decreasing of consumers' trust, increased worry, even in angry reactions. People who deal with estimations and managing of risks present in the food are aware that the public perception of risk and benefit is crucial for accepting or refusing technologies and products. In the lack of credible and understandable information, the level of perception based on insecurity and personal fears increases (Van Kleef et al., 2006), which intensifies by different psy-

Scheme 1. Model of the interactive communication of the risks in food – a coordination body collects, processes, analyzes and interprets data, and makes the information available to the interested parties



chological and cultural profiles and it results in different reactions on hazards to health or life.

The last data related to researches in the field of consumers' perception in the EU show decreased consumers' trust in food safety, despite of even better controls (EC, 2006). As opposed to perception of experts in the field of food safety, formulation of perception of the dangers in food and the risks related to them is based more with an average consumer on behavioral patterns, which often appear as a result of irrational, illogical conclusions that are inconsistent with the opinions of experts and scientific conceptions (Hilgartner, 1990; Korthals, 2006). So, there is often a case of consumers systematically overestimate certain risks with low probability of causing harmful consequences ("perceived risk"), whereas the real risks are underestimated (Miles and Frewer, 2001). On the other hand, a lesser concern is connected to the dangers that can be controlled by a personal choice (avoiding), which can be decreased to that point that the risk is ignored on a conscious level (EC, 2006).

Significance of the new technologies in food production or chemical risks in food is often overestimated because of the sense of insufficient knowledge of risk and the impossibility of its control (McCarthy et al., 2007). In the modern time and society where the availability of food is overcome, technological risks appear on everyday- basis, which is often related to the innovations in agro industry or food industry of the processed food. Technological risks in food and the risks related to them so become a product of human activity. In a recent history, we witnessed how the appearance of new risks can have its roots in greed and an aspiration for extra profit hence making damages to the health of the consumers of that same food (BSE, dioxins, melamine). Technological risks in food are often under researched, because their appearance in the food is unnatural, which imposes the need for experts' explanation that includes all the insecurities in risk estimation.

"PERCEPTIONAL FILTERS"

While making personal subjective risk estimations towards a large number of risks in food, consumers simply don't use highly specific and measurable concepts that technical estimations of food safety usually rely on (Miles and Frewer, 2001). Examples of such concepts can be found in determining the NOEL ("no-observable effect level"), the ADI ("allowable daily intake") or the MRL ("maximum residue level") values (Verbeke, 2001). The reason for such occurrence lies in the fact that consumers consider the risk for population more acceptable than the personal risk, whereas the decisions for border values of NOEL, ADI and MRL values are made manly on scientifically based estimation of risks for the population. Therefore the difference in the perception of risk between an average consumer and an expert is attributed to the existence of the so called "perceptional filters" which remove the reality, i.e. scientific conceptions from the consumer's perception of this reality. In that process, there is a great significance of the fact that there is a tendency of an easier acceptability of the risks which are a result of a personal choice than of the technological risks which can't be avoided in this way (Miles et al., 2004).

It turned out that a large number of consumers doesn't process the information directed to the improvement of the level of knowledge on risks in food through the different aspects of informative campaigns (Grunert, 2005). Furthermore, negative information are more strongly perceived than the positive ones, which is contributed by the media that cause a stronger resounding after publicizing negative information (Swinnen et al., 2005). The explanation for such behavior lies in multiply related factors which include the nature of risk in a combination with many psychological processes. Even in the cases when the consumers clearly differentiate the risks from certain dangers in food, it often happens that because of an unselective acceptance of information, kinds of food related to certain risks are mixed. It turned out that consumers don't differentiate to a larger extent the degree of risk from the dioxin in chicken, residues of antibiotics in pork and residues of hormones in beef, although each of these dangers is related to a different degree of harmful effect. A good example of an unselective perception of the relation pathogen – food is a report that 45% of consumers in Belgium relate Bovine Spongiform Encephalopathy to chicken (Verbeke, 2001). The occurrence of several scandals related to a similar kind of food (meat) has led to the situation that consumers perceived meat as the kind of food to which they have the least confidence in at the end of the 1990s (Becker, 2000). With the listed, the worry for the escalation of new zoonoses like the Avian Influenza is also constant (EC, 2006). Fear and anger are the most significant factors in the perception of risk. So the fear is more strongly expressed with the appearance of risk which can't be controlled personally (e.g. cooking the meat infected with BSE and alike) or in the situations when the opinions of different parties (producers, government institutions and others) are different (Bennet and Calman, 1999). In that process negative emotions can significantly affect the readiness of the public to take concrete actions in the sense of avoiding the risk in different segments of life (Turner, 2007). All these aspects are necessary to be taken into consideration during the communication of the risks in food.

CONCLUSION

Consumers' perception of the risks in food has been more significantly represented in recent years as the subject of researches of the prominent institutions in the world. Understanding the specific quality of consumers' perception of the dangers in food is easier through including them to the system of the interactive communication, which is also a precondition for creating modern systems of food safety (Antunović, 2008). Empowering the communication system between the institutions included in the system of food safety in Croatia (internal communication), as well as the transparency and interaction between all the interested parties (external communication), are the most important segments of building a system of the interactive communication in harmony with the new scheme of the food risks analysis (FAO/WHO, 2006). Looking generally, a dialogue as a way of life represents a basic precondition of a general humanization, even democratization of every social community (Kuzmić, 2008). We can only ask ourselves: "Are we swimming in the sea of communication"?

* This paper resulted from Robert Rubil's graduation thesis, which was written under the supervision of the assistant professor Boris Antunović, Ph.D. and it was defended on December 3, 2008

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Received: November 20, 2008
Accepted: November 28, 2008

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