SAFE FOODS – Promoting food safety through a new integrated risk analysis approach for foods

http://www.safefoods.nl

The European food chain is generally considered as one of the safest in the world. Paradoxically, consumers in Europe have little confidence in the safety of their food supply and remain sceptical and distrustful of the institutions and the procedures currently in place. Consumer trust has declined as a result of a series of recent food safety incidents (e.g. BSE, dioxins) and the introduction of genetically modified foods in Europe. SAFE FOODS aims to contribute to the restoration of consumer confidence in the food chain through the development of a new integrated risk analysis approach for foods. In this new framework, an efficient interaction between the risk analysis components and integration of societal values will play a central role.

The EU 6th Framework Integrated Project SAFE FOODS has celebrated its first anniversary in April 2005 and its research activities are now on full speed. Lasting four years, SAFE FOODS seeks to refine risk analysis practice for food safety via an interdisciplinary approach. Combining the skills of natural and social scientists, 33 institutions from 17 countries are involved. The inclusion in the project of researchers from South Africa and China allows the risk analysis strategies developed to be tested on a global scale.

SAFE FOODS is coordinated by Dr. Harry Kuiper and Dr. Hans Marvin of the RIKILT Institute of Food Safety in Wageningen, The Netherlands. It is in many ways the successor of ENTRANSFOOD, an EU project that focused on the safety assessment of genetically modified food crops. Dr. Hans Marvin is also coordinating another EU FP6 project, SELAMAT (meaning safety in the Malay language). Being a sister project of SAFE FOODS, SELAMAT aims to create a network for sharing food safety expertise between Europe and Asia.

SAFE FOODS aims to design new and effective procedures for analysing risks for foods produced by different production practices (high- or low-input systems) and with different breeding technologies (traditional, molecular, and genetic modification). The research activities cover a broad range of scientific disciplines (e.g. plant molecular biology, microbiology, chemistry, bioinformatics, sociology, political sciences). This integrative approach will result in designing new effective procedures for risk analysis underpinned by new scientific
assessment methods, and embedded in a broad impact analysis of social, financial, and economic consequences, and with high levels of transparency, active public engagement and improved risk communication.

In the project, questions are addressed regarding (i) the applicability of new functional genomics profiling technologies for the identification of emerging risks in food production, (ii) how information about risk assessment should be communicated to the public and how public concerns can be incorporated into this process, (iii) how effective communication and inclusive public participation in risk management and science and technology policy can be developed, and (iv) the role of institutions involved in risk assessment and management in the light of a broader risk analysis framework taking socio-economic, risk-benefit issues, consequences of introducing foods and new production methods into account. SAFE FOODS is currently investigating the institutional challenges and the needs for procedural and structural reforms. The resulting general framework for food safety governance seeks to provide satisfactory answers to the challenges of dealing with highly complex, uncertain and ambiguous food risks.

The main objectives of SAFE FOODS are as follows:

- To develop comparative safety assessment methods for foods produced by different breeding approaches and production practices deploying high- and low-input systems
- To design a working-procedure for early identification of emerging chemical or microbial risks in food production chains in an expanding European market.
- To develop new quantitative risk assessment models for combined exposure of food contaminants and natural toxins
- To investigate consumers confidence/preferences in risk analysis practices for foods including labelling and nutrition issues.
- To understand differences in food risk perceptions of consumers, experts, and decision-makers and to design informative risk communication strategies.
- To investigate the role of institutions across Europe involved in risk assessment and management given the greater interest of the consumer in taking a broader impact of food production on environment, animal welfare, sustainability and socio-economic consequences into account.
- To design a new risk analysis approach for foods, integrating scientific principles, societal aspects and effective public participation.

The major outcome of the project will be a new risk analysis approach for food safety management that integrates risk assessment of human health, consumer preferences and values, as well as impact analysis of socio-economic aspects. The new elements in the risk analysis model that is being developed by SAFE FOODS are:

- Broader horizon for risk analysis
- New approaches for the detection of risks in an early phase
- Adaptation of risk assessment strategies in the light of new scientific developments (genomics, profiling technologies and probabilistic methods)
- Analysis of stakeholders’ attitudes towards risks and risk analysis
- Extended risk uncertainty analysis
- Inclusion of quality-of-life parameters in risk analysis

In October 2005, the first SAFE FOODS multi-stakeholder conference will be organised in Athens. A wide range of concerned stakeholders, such as risk assessors, regulatory bodies, food producers and consumer organisations, will be invited to provide input and to test the new framework.

This new risk analysis approach will have significant implications for risk assessment and risk management. The strength of the model is the transparent and new way of risk identification and assessment using newly developed methods, and the inclusive way of risk management with active involvement of all stakeholders, taking a broad range of ethical, social and economical factors into account. With this new integrated risk analysis approach, SAFE FOODS aims to restore and strengthen consumer confidence in consumer protection and risk analysis.

In the SAFE FOODS project, special attention is given to training activities (particularly in new EU Member States and Pre-Accession Countries) and to dissemination of its research results. For more details, please visit our project website: http://www.safefoods.nl or email Filip.Cnudde@wur.nl.

For more information on the other EU projects: www.entransfood.com
www.selamat.net

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