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EFSA: from safe food to healthy diets

On the occasion of its fifth anniversary, the European Food Safety Authority (EFSA) organised a Scientific Forum in Brussels entitled “*From Safe Food to Healthy Diets*” on 20th and 21st November 2007. In excess of 500 food-safety experts from more than 40 countries around the world welcomed the opportunity to debate and discuss key scientific issues that regularly make headlines and have political, ethical and economic implications across Europe. In the opening plenary session, keynote addresses from representatives of the European Parliament and the Commission were complemented by a speech on “Sharing scientific expertise to build on scientific excellence” by a Portuguese scientist.

The speakers at the Forum – all experts in their specific fields – attracted great interest from the scientific community and other interested parties, such as representatives from EU Member States, consumer organisations, industry, NGOs (non-governmental organisations) and the media. The programme covered the most challenging issues facing EFSA and stimulated lively debate with the audience. The conference was also webcast live on the EFSA website; the viewing statistics indicate that the opportunity to watch the debates live and by video-on-demand afterwards was welcomed by interested parties in Europe and beyond. (Video-recordings are still available on-line.¹)

As part of the debate on food safety, the Scientific Forum looked, on its first day, at current problems. Chemical and microbiological risks, as well as public health concerns arising from unhealthy diets, are considered major challenges. The second day offered a series of roundtable sessions on a range of diverse subjects related to the food chain (“*from farm to fork*”), aimed at covering EFSA’s remit as well as looking at new and emerging issues in food safety.

A number of sessions dealt with “*Lessons learned and developments in risk assessment*”. One contribution focused, for example, on biological risks. A number of EU-wide studies to determine the prevalence of *Salmonella* in laying hens, broilers and turkeys have been carried out successfully. Results support the assumption that poultry products, in particular eggs, are regular sources of human *Salmonella* infections. They also demonstrate that the prevalence of *Salmonella* in laying hens and broiler flocks varies significantly among Member States. Researchers are developing models to estimate associated health risks in order to enhance support for the decision-making process at European level. There is a growing demand for quantitative microbiological risk assessment and EFSA is uniquely positioned to address this need.

Past, present and future aspects of BSE and TSEs were also examined. Since the late 90s, science-based control measures in the EU have succeeded in restricting the BSE epidemic, which has continuously declined in recent years in most Member States. However, some scientific uncertainties remain; for example, we do not know whether BSE and other animal TSEs can be completely eradicated.

Consumers are exposed to a number of different chemicals such as pesticides, dioxins and dioxin-like compounds. Discussions at the Forum concentrated on how to quantify the risk related to those contaminants in order to protect the consumer. Monitoring programmes indicate that measures to reduce dioxin exposure have been effective. Nevertheless, recent examples of dioxin contamination indicate that it is wise to remain vigilant. Human exposure to multiple chemicals, such as multiple pesticide residues, is an issue widely discussed among scientists; hence the issue was also touched upon at the Forum. Exposure to

a mixture of compounds can lead to cumulative effects, or compounds can interact and enhance or weaken the expected effect. The discussion of the Forum centered on cumulative risk assessment of compounds sharing the same mode of action. Continuous dialogue between the risk assessors (toxicologists, experts in residues and exposure through food consumption) and risk managers were considered essential.

Consumer perception of food safety often focuses on substances added to food. Food additives, such as sweeteners, food colours and flavourings, are added to a food to provide technological functions; it is evident that rigorous safety assessment is crucial to ensure that the substances are safe for human consumption. Both the evaluation of new substances as well as the systematic re-evaluation of all food additives currently authorised in the EU in the light of significant new scientific evidence are key tasks for EFSA. Hence, a session was dedicated to this area including legal and illegal colours and smoke flavourings.

EFSA’s remit not only covers the risk assessment of food and feed, but also animal health and welfare issues, including animal husbandry aspects. Europe is considered the centre of animal welfare research worldwide, reflected by the large number of publications by European researchers in scientific journals. The Forum included speakers from three different EU Member States reporting on animal welfare issues, as well as a representative from the World Organisation for Animal Health (OIE) who described cooperative and complementary activities between OIE and EFSA.

EFSA is facing new challenges associated with new and innovative technologies, hence a plenary session was dedicated to nanotechnology in food and feed. Representatives from the European Commission, industry, a Dutch research institute and NGOs exchanged views and debated pros and cons. It became evident that communication on this new technology is of major importance, as consumer acceptance and trust in the new technology will depend on the perceived benefit of innovation and on transparent information. Animal cloning, another new challenge, was discussed from the perspectives of scientific research, food safety and animal health and welfare.

In the session on genetically modified organisms (GMOs), experts from the USA, Australia, Canada and Europe presented and discussed different approaches to the risk assessments of GMOs.

The issue of technological advances versus safety evaluation were picked up in the session on active and intelligent food packaging. Other experts focused on human diets by discussing data collection and databases that enhance our knowledge of “what we eat” and by analysing health risks and benefits. For example, one debate considered the question of whether we should “eat our greens” even though they may contain a considerable amount of nitrate and another discussed whether food fortification may pose a risk to some consumers while benefiting the majority.

In addition to risk assessment, EFSA’s other core activity is communication of scientific information in a clear and understandable manner. Given the diversity in foods, dietary patterns, culinary traditions and attitudes to food and food-related risks within the EU, it is unlikely that a single message will reach its almost 500 million consumers. Hence, it is important for EFSA to work closely with national food safety authorities and stakeholders in Member States, both in the development and the dissemination of its scientific advice. In a plenary session, a French expert in social science underpinned the importance of understanding consumer perception of food and of food-related risks to facilitate efficient communication and (re-)gain consumer confidence in the food supply.

More than one speaker acknowledged that EFSA scientists have delivered an impressive output by issuing more than 500 opinions, guidance documents and peer reviews on issues covering the food chain – from stable to table – during the 5 years of its existence. One of EFSA’s

¹ The video-on-demand can be found on EFSA’s website at http://www.efsa.europa.eu/EFSA/EventsMeetings/efsa_locale-1178620753812_EfsaScientificForumFoodSafetySummit.htm.

key achievements has been the development of scientific networks that have facilitated the sharing of knowledge, data and resources. This network of scientific excellence must be further developed, both with Member States but also with non-EU countries, to position EFSA as a global reference point in food safety. Delivering the best science at the right time and in the most appropriate manner can only be achieved through effective pooling of the wide scientific excellence available in Europe. To achieve this, scientific cooperation is critical in order to match resources with priorities while avoiding duplication of activities and improving the coordination of work programmes. In this manner, fostering close scientific cooperation across the EU is welcomed by the national authorities of the Member States.

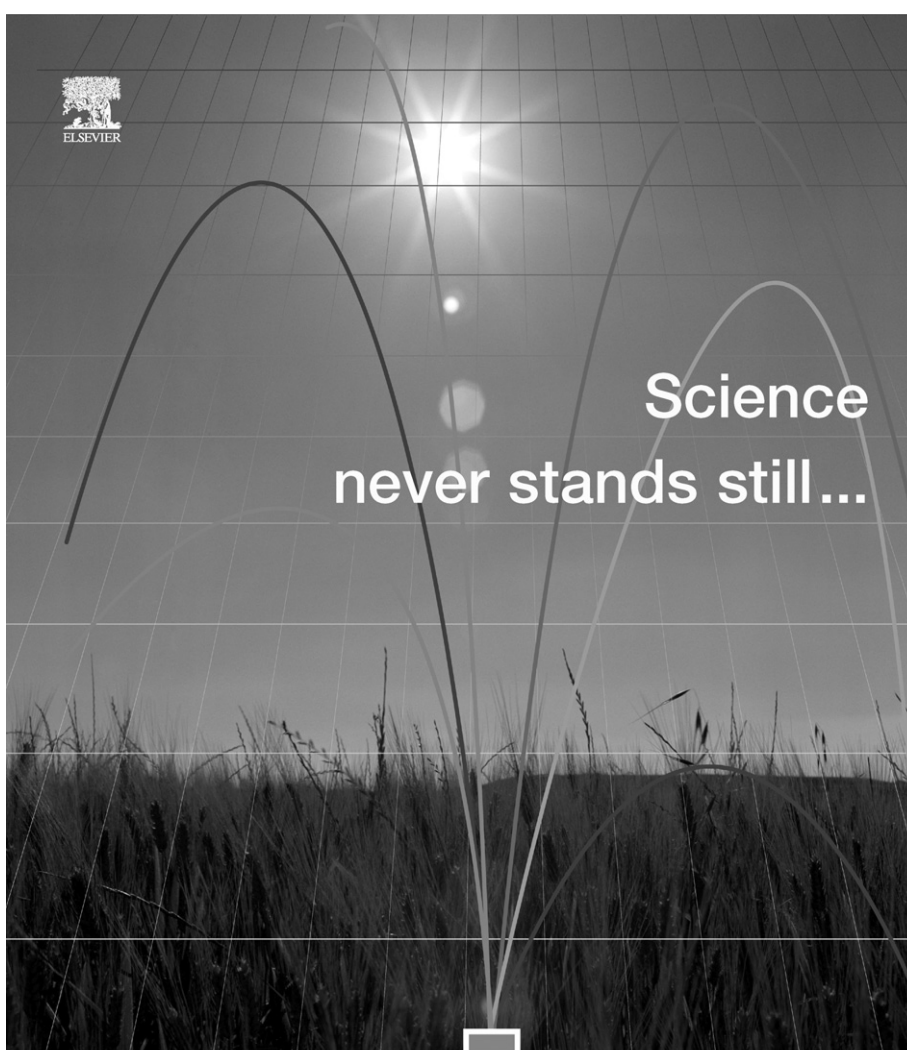
In the concluding remarks, it was again pointed out that a relatively new organisation like EFSA must make every effort to build trust with all its stakeholders. In order to achieve this goal, the highest standards of scientific excellence, transparency and timeliness are required. While being independent, EFSA should continue to be aware of policy

needs. EFSA's workload is increasing constantly; hence it is crucial that EFSA has the structures and resources in place to manage the workload.

The day after the EFSA Scientific Forum, a *European Food Safety Summit* was organised by EFSA jointly with the Portuguese Presidency and the European Commission. Whilst the Scientific Forum focused on scientific issues, the Summit completed the picture by touching upon related political aspects.

More detailed information on the EFSA Scientific Forum is available on EFSA's website; review papers by different speakers will be published later this year as a supplement to this Journal.

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