

# ISEKI\_Food Network: Role in Food Studies and Career of Food Scientists and Food Technologists

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## Résumé

La Commission Européenne finance plusieurs réseaux académiques internationaux avec des objectifs orientés vers l'éducation et la formation, la recherche et les relations avec les industries et les gouvernements. En particulier dans le domaine alimentaire le réseau ISEKI\_Food (Integrating Safety and Environment Knowledge In Food towards European Sustainable Development) (<http://www.iseki-food.eu/>) fut initié il y a 11 ans. Ce réseau s'est développé, montrant que les aspects internationaux des Sciences et Procédés Alimentaires sont de plus en plus importants pour les gouvernements, l'industrie et l'enseignement.

*ISEKI\_Food was designed as a network of University and Research Institutions, Professional Associations, Industrial partners and Students Associations to foster collaboration on a variety of joint interest projects. Several European and 6 global academic networks projects received funding between 1998 and 2011 from the European Commission.*

## Abstract

The European Commission has been financing several international academic networks, which the objectives are towards topics related with education/training, research, industry and governments. Particularly in the food field, the ISEKI\_Food (Integrating Safety and Environment Knowledge In Food towards European Sustainable Development - (<http://www.iseki-food.eu/>) network was initiated eleven years ago. This network has been expanding, demonstrating that international aspects of food science and engineering, as well as related subjects, are more and more important for governments, industry and the academics.

## Key words

Education and training in the field of Food Studies; Higher Education Area; Internationalization; Quality Assurance

## ISEKI\_Food Integrating Food Science and Engineering Knowledge Into the Food Chain - Historical Timeline -

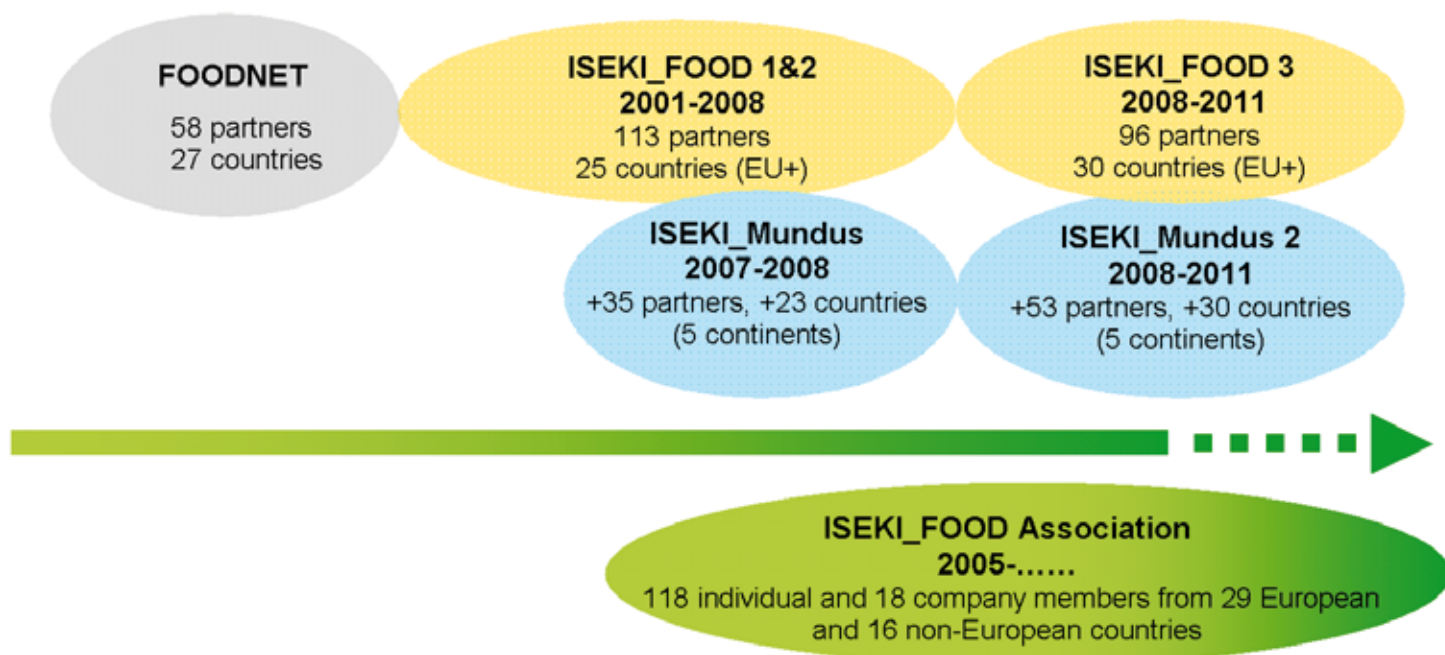


Figure1. Timeline of the establishment and growth of networks under the ISEKI\_Food initiative.

To ensure the sustainability of the network activities the ISEKI\_Food Association (<http://www.iseki-food.net/>) was founded in 2005 to be a leading network for all stakeholders in the food supply chain with regard to education, legislation and communication.

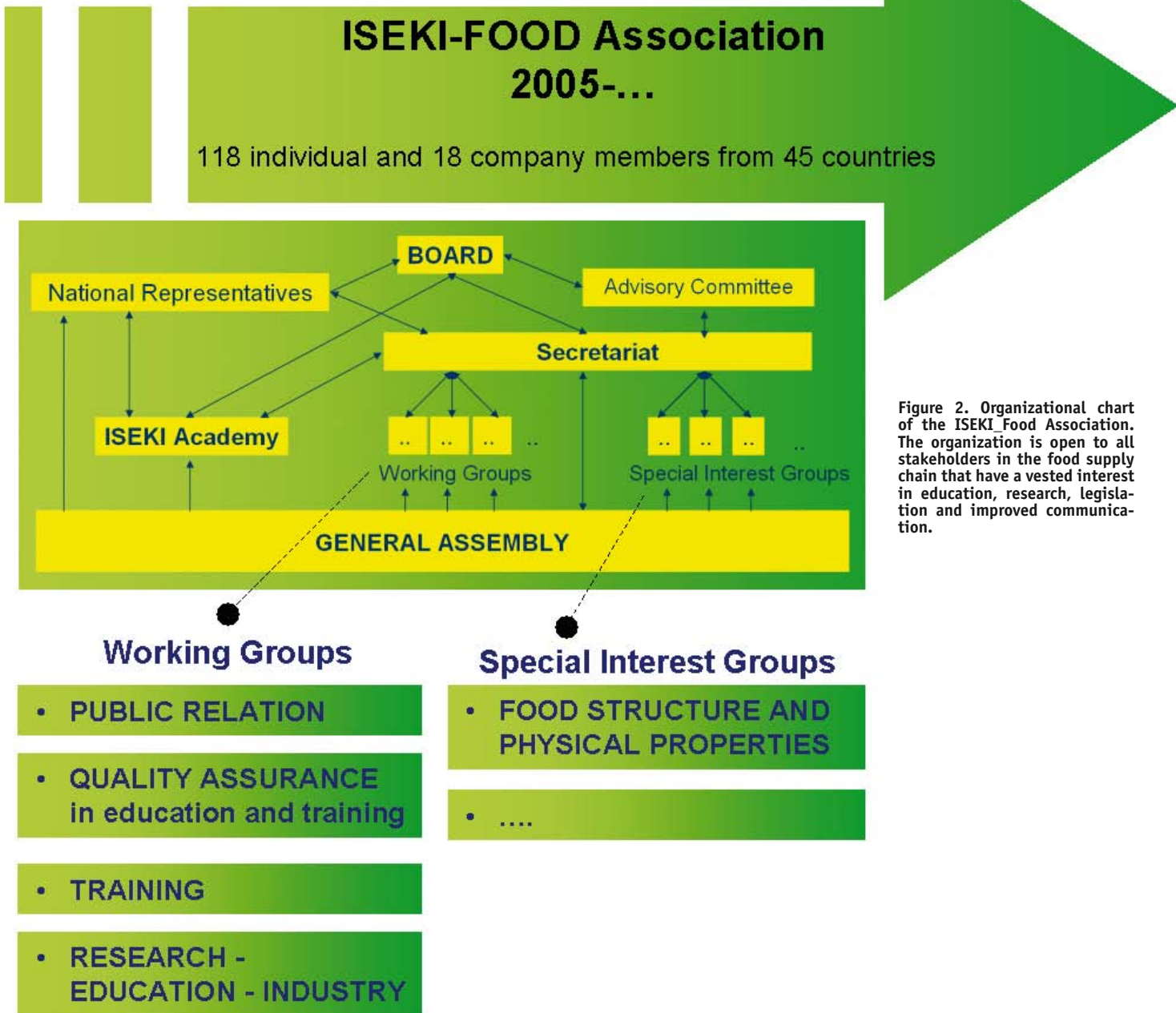


Figure 2. Organizational chart of the ISEKI\_Food Association. The organization is open to all stakeholders in the food supply chain that have a vested interest in education, research, legislation and improved communication.

The main objectives of the network are to contribute to the European Higher Education Area (EHEA) in the field of Food Studies by internationalization and enhancement of quality. The workplan is fostering innovative developments, enhancement of food studies quality, and improvement of European higher education international attractiveness.

More specific objectives are: 1) Creation of a Virtual Networking Environment (VNE) for International Cooperation and Mobility; 2) The European Quality Assurance System for Food Study Programmes (EQAS\_Food); 3) Facilitating/ Promoting/ Fostering Lifelong Learning in Higher Education (APEL); 4) Innovation in Food Study materials; 5) Development of a Platform for the International Cooperation and Mobility in the field of Food (PICAM\_Food); and 6) Exploitation of research results especially to small and medium enterprises (SME's).

## ISEKI\_Food Network

ISEKI\_Food 3 (Integrating Food Science and Engineering Knowledge Into the Food Chain, <http://www.ISEKI-Food.eu/>) is one of the Academic networks in the Life Long Learning Programme (LLP) of the European Union (EU). This academic network, running from 2008 – 2011, includes 95 institutions (74 universities, 11 industrial and research partners and 10 Associations). This project is structured into 8 working groups (WG), each with several coordinators coming from different institutions and countries. Necessary annual meetings are programmed to know each other, share the different experiences and to develop further joined activities. The main outputs of ISEKI-Food 3 are: Guidelines for Quality Assurance of Food studies, Workshops, Web databases, Teaching materials and methods (including books, e-learning courses and

a training network) and a “Virtual” community of actors in the field of Food.

ISEKI\_Mundus 2 (Integrating Safety and Environmental Knowledge in World Food Studies, <http://www.ISEKI-Food.eu/>), running from 2008 – 2011, is an extension of the ISEKI\_Food 3 project, including 53 countries from all continents, from Canada to New Zealand. The main objectives are to “Foster the internationalization and enhance the quality of the European Higher Education Food Studies” and “Promotion of good communication and understanding between European countries and the rest of the world”.

ISEKI-Food Association (European Association for Integrating Food Science and Engineering Knowledge Into the Food Chain, <http://www.iseki-food.net/>) is an outcome of ISEKI\_Food, founded in 2005 to guarantee the sustainability of all the results from several projects after the financial support of the European Commission. The organization currently has more than 110 individual and 18 company members from 45 countries, and focuses on promoting synergy between research, education/teaching and industry with respect to Food Science and Food Technology, promote global food quality assurance, development of a virtual community of experts in the field of food, with communication to the general public, establish a framework of agreements among partners, fostering the mobility of students and staff, and create internal bodies that promote the integration of science and engineering knowledge into the food chain and to recognize outstanding achievements in food sciences through the ISEKI Academy. Today the ISEKI\_Food Network is one of the most successful EU\_Networks, that is managing to achieve a great impact through its internationalization and communication to the rest of the world.

## The Role of the ISEKI\_Food Network

The food and beverage industry is the largest European manufacturing sector in terms of turnover, value-added and employment. However, it is fragmented in SMEs / microenterprises (99,1% businesses – generating 48.1% of food and beverage turnover and employing 61.6% of the sectoral workforce) and multinational companies (0.9.% business – 51.6% turnover, 53.5% added value and 38.4% of the employment). Labour productivity and percentage of higher-level skilled and better paid staff is considerably lower than in most other industry sectors. Moreover, in terms of innovation performance ranking, investment in research and export/import Europe has been losing position, compared with other regions of the world.

Therefore, the need for well prepared food professionals, with the right skills and competencies, is a continuous challenge. Professionals in this field have to have a multidisciplinary view at European level, and good knowledge on safety, health and preference, and environmental aspects. Moreover, actual conceptions of Lifelong Learning are focused on employability, flexible career and qualifications paths and strong connection among qualifications providers and society.

Through the previous projects, the network has been mainly working on: the tuning of curricula and agreement on food studies minimum requirements; curricula design based on learning outcomes and competences; alignment between teaching, learning and evaluation; compilation of quality monitoring systems for university teaching in Europe and comparison with other non-European systems and proposal for a common European method; teaching materials and methods; relation between education, research and industry; among others.

There is a need to continuously develop most of the mentioned working topics, and start working on new aspects, in order to

achieve the Lifelong Learning objectives and the Lisbon goal – make Europe the most competitive and “knowledge-based” economy in the world.

## Conclusion

The ISEKI\_Food 3 and ISEKI\_Mundus 2 projects include work-packages on dissemination and exploitation of results, willing to strength and consolidate the ISEKI\_Food Association (IFA). IFA will be developing activities in the field of the consortium work, such as an E-journal, and workshops, that will contribute for its sustainability beyond the Socrates/Erasmus financing. This will allow the network to continue its work towards the internationalization and quality enhancement of the European Higher Education Food Studies. Moreover, the maintenance of this network will contribute for the prestige and attractiveness of the European Higher Education Food Studies and to attract IFA members from all over the world.

**A final two days conclusion conference (2<sup>nd</sup> International ISEKI\_Food Conference) will be organized to present and disseminate the final projects (ISEKI\_Mundus 2 and ISEKI\_Food 3) outputs and conclusions. This conference will occur on 31<sup>st</sup> August to 2<sup>nd</sup> September 2011, in Milan-Italy.**

Today the ISEKI\_Food Network is one of the most successful EU Networks, that is managing to achieve a great impact through its internationalization and communication to the rest of the world. ■

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