Bridging education, research and industry: the ISEKI-Food approach to implement quality and safety along the food chain

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In the last decades, food quality and safety have been highly topical in research, industry, as well as in food policy and public debates. This has been lead by many factors and issues including foodborne scares and outbreaks, globalisation and liberalisation of food production and trade, food security concerns and, on the opposite side, changes in life style and the more demanding consumers of quality differentiation of food products and the growing awareness of food safety and quality issues and better information.

Modern approaches and methodologies in basic and applied research are developing knowledge and innovation on food production and processing technologies as well as on science-based food control systems that have to be transferred to the food industry to positively impact the quality and safety of foods.

At a global level, industry is highly committed to provide and guarantee every day safe and qualitatively valuable foods to the consumers by using the certified equipment and designing sound quality manufacturing systems.

In the food chain education is a pillar when its training approaches are implied in the preparation of food employees and professionals with the proper quality and safety skills meeting the current job market requirements.

A constructive, coherent and transparent engagement of all stakeholders and the development of permanent interfaces is the paramount to implement quality and safety knowledge, management and communication as well as training at all levels of the food sector tuned with the broader values of society and with clear and visible benefits to consumers. In this framework, food studies and careers at higher education level have to be involved in a continuous process to adapt contents and disciplines, educational and training approaches and methodologies to allow to acquire the required quality and safety skills.

The European Commission has been financing several international academic networks, whose objectives are towards topics related with education/training, research, industry and governments and in the food field, the ISEKI_Food (Integrating Safety and Environment Knowledge In Food towards European Sustainable Development - http://www.iseki-food.eu/ and - http://www.isekifood4.eu/) network was initiated eleven years ago and seven European and world wide academic networks projects received funding between 1998 and 2014. 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.

This network has been progressively expanding, demonstrating that the interconnection between research, industry and academia on food technology and engineering is more and more important for the implementation of the whole food chain, through the setting of a modern and qualified education and training framework in an international dimension.

To support the identification of the training and career requirements of future European food professionals the ISEKI_Food network (<u>www.iseki-food.net</u>) was promoter of a project under the FP7 programme. The TRACK FAST project (https://www.trackfast.eu/), a KBBE support action currently ongoing (2009-2013), has as main objective the identification of the educational, training

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and career requirements of the next generation of food scientists and technologist and the implementation of a European strategy to recruit the next generation FST leaders.

In this presentation, the main initiatives of the ISEKI_Food network at EU and international level aimed to contribute to the innovation of the food chain will be reviewed.