Over the last decade, the idea of not just looking at risk assessment but looking at a more integrated approach where risks and benefits are assessed one against the other has progressed.

The European Commission granted a Specific Support Action in 2007 to investigate the Risk Benefit Analysis for Foods (BRAFO) to address this issue. This three-year project aimed at looking at current methodologies for Benefit/Risk Assessment of foods and proposed an assessment methodology that could be applied to a wide range of foods. The methodology that has been developed is based on the evaluation of changes in the quality/duration of life using a system that allows weighting of data quality and severity of effect, with quantification by QALY or DALY-like methodology. The framework takes into account how risks and benefits interact utilising a tiered approach where in many cases, a lower tier assessment using simple methods may be sufficient to show a clear difference between the health impacts of different scenarios. In other cases, increasingly sophisticated methods are used at higher tiers until there is sufficient certainty for decision-making. Because of its transparency, this methodology can provide a basis for or guide the harmonisation of the evaluation methods used within the European Union and more widely in international evaluations.

BRAFO provides a convincing case whereby building on previous projects funded by the European Commission offers significant synergy. As such, this cross-fertilisation originated from three other European Commission funded projects also coordinated by ILSI Europe. FOSIE (Food Safety in Europe), was set up in 2000 to critically assess current knowledge in risk assessment and examine the science base for new qualitative and quantitative methodologies for assessing risks from chemical substances in the food chain. ILSI Europe was also coordinating the EC Concerted Action on FUFOSE (Functional Food Science in Europe, 1995–1997). FUFOSE assessed the scientific basis that specific nutrients positively affect physiological functions. Four years later, the FUFOSE conclusions and principles were taken to the next logical stage, i.e., application of the principles in PASSCLAIM (Process for the Assessment of Scientific Support for Claims on Foods). Ways and criteria to develop valid study designs and to identify markers to explore the effects of diets on health were further identified in the PASSCLAIM project.

The last step was for ILSI Europe to combine the findings of these three initiatives into a new project (BRAFO) looking at the overall benefit/risk analysis of foods.

The results of the work of the experts which included the detailed BRAFO methodology and its application to a series of case studies are presented in this supplement. A Consensus manuscript is being published in Food Chemicals and Toxicology by the end of 2012.

As the coordinator of this project, we are proud of the results obtained by the network of experts involved. We are thankful to the ILSI Europe Risk Assessment of Chemicals in Food who initiated this project and its submission as an EC Concerted Action. We are also grateful to the Project Partners RIVM (Dutch National Institute for Public Health and the Environment, NL), Imperial College London (UK), the Max Rubner-Institute (DE), Procter & Gamble (BE) and to all the experts involved in this project for their dedication.