Editorial

Novel Approaches for Risk Assessment of Phytochemicals in Food

The Senate Commission on Food Safety (SKLM) of the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) gives scientific advice to politics on the safety of foods [1]. Risk assessment of food has to consider man-made chemicals as well as naturally occurring compounds, which might influence human health. An international symposium "Risk assessment of phytochemicals in food–novel approaches" was held from March 30 to April 1 2009 in Kaiserslautern, Germany. The SKLM discussed with international experts from academia, industry and authorities, the promise of innovative "omic" methodologies including various *in-silico*, *in-vitro* and *in-vivo* approaches, to enhance predictivity and reliability of scientific information on which to base food safety assessment. These new methodologies are at different stages of development and applicability for food safety assessment. Conclusions and recommendations elaborated by the SKLM addressed gaps in knowledge and research needs. The proceedings of the symposium, encompassing all 19 contributions of the invited experts, poster contributions and the conclusions and recommendations of the Senate Commission, are to be published in the DFG-SKLM symposium series (Wiley-VCH). Previous issues addressed *Food Allergies and Intolerances* (1995), *Hormonally Active Agents in Food* (1996), *Carcinogenic/Anticarcinogenic Factors in Food* (1998), *Functional Food: Safety Aspects* (2002) and *Thermal Processing of Food: Potential Health Benefits and Risks* (2005). In parallel to the symposium monograph, selected publications have been compiled in the present special issue of *Molecular Nutrition & Food Research*.

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[1] Eisenbrand, G., The DFG-Senate Commission on Food Safety (SKLM) – A profile, *Mol. Nutr. Food Res.* 2005, *49*, 285–288.

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