BOOK OF ABSTRACTS

11th International Symposium on
RECENT ADVANCES IN FOOD ANALYSIS

November 5–8, 2024

Prague, Czech Republic

Jana Pulkrabová, Monika Tomaniová, Stefan van Leeuwen, Michele Suman, Michel Nielen and Jana Hajšlová

Editors




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**Department of Food Analysis and Nutrition,
University of Chemistry and Technology, Prague (UCT Prague),
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&

Wageningen Food Safety Research (WFSR), part of Wageningen University & Research, The Netherlands

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L17
STANDARDIZATION OF A REFERENCE METHOD FOR MULTIPLE ALLERGEN DETERMINATION IN FOODS, PRECAUTIONARY ALLERGEN LABELLING AND REFERENCE DOSES: THREE ISSUES IN FOOD ALLERGY RESEARCH

Linda Monaci*[1], **Elisabetta De Angelis**[1], **Anna Luparelli**[1], **Rosa Pilolli**[2], **Francesca Lambertini**[3]

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Food allergy is considered a major safety issue for allergic consumers. European legislation with regulation 1169/2011 mandated the labelling of 14 allergenic ingredients whenever intentionally introduced into a food, although the risk of detecting allergens in foods expected to be allergen free is likely to exist due to the likelihood of cross-contamination. The risk of accidental cross-contamination, by allergens, has prompted food industries to make excessive use of Precautionary Allergen Labelling (PAL) and the WAO working group on food allergens is currently highlighting the need for a regulated, international framework to underpin application of PAL [1].
Efforts to protect allergic population have been put in place in the last decade at several levels: i) developing sensitive and reproducible analytical methodologies to detect and quantify even minute amounts of allergenic ingredients in foods, to verify compliance with the reference doses recommended ii) regulating the use of precautionary labelling iii) establishing reactivity thresholds for each individual allergen. All these aspects representing crucial issues in food allergy research and efforts in progress at international level to overcome these obstacles will be discussed in this note.
Emphasis will be given to illustrate advantages of analytical methods developed according to the international European guidelines and to illustrate the last results obtained within the ThRAll project [2] recently concluded about the development of a MS/MS based reference method for multiple allergens determination in complex food matrices. Finally, application of the method for multiple detection of allergens in two types of bakery products such as cookies and rusks produced at pilot scale will be also presented.

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