

“Recent advances in phytochemical research: from food composition analysis to metabolomics”

RSC Food Group and Nutrition Society Special Interest Group on Phytochemicals and Health joint Symposium (Thursday 10th September, Burlington House, London)

09:30–10:00 Registration and opening remarks

10:00–10:30 Keynote lecture: Assessing polyphenol exposure across the dietary–metabolic continuum: Integrating dietary assessment, biomarkers and metabolomics - Dr Claudine Manach, INRAE (France)

10:30–11:00 Coffee break and posters

11:00–12:15 Session 1: Phytochemical composition of foods: factors affecting bioaccessibility and bioavailability

11:00–11:30 Plant bioactives in motion: from food matrix to human metabolism - Dr Pedro Mena, University of Parma (Italy).

11:30–11:45 Beyond Plant Myrosinase: The Role of *Lactiplantibacillus plantarum* in Glucoraphanin Conversion and Sulforaphane Bioavailability - Dr Ali Redha, Leibniz University Hannover (Germany).

11:45–12:00 Untargeted metabolomic profiling of coffee intake: An acute randomised controlled trial - Altaf Farraj, University of Reading (UK).

12:00–12:15 From gut adaptation to brain response: multi-platform metabolomics of a berry-enriched diet in an MPTP mouse model - Carlos Pita, Universidade Nova de Lisboa (Portugal).

12:15–13:00 Lunch and posters

13:00–14:15 Session 2: Metabolic fate of phytochemicals: role of the gut microbiome

13:00–13:30 TBC Prof Wendy Russell, Rowett Institute (UK)

13:30–13:45 Inter-individual variability in the colonic metabolism of flavan-3-ols: how the dehydroxylation capacity defines urinary gut metabolotypes – Dr Nicole Tosi, University of Parma (Italy).

13:45–14:00 Inter-individual variability in urolithin metabolite excretion following an ellagitannin-rich challenge: results from StratiPol study -Xiaohe Liu, King's College London (UK)

14:00–14:15 Investigation of endogenous and/or exogenous origin of phenolic metabolites in humans (endophenol) - Laila Zeraik, University of Parma (Italy)

14:15–14:45 Coffee break and posters

14:45–16:00 Session 3: Assessing intake and exposure to phytochemicals: from dietary questionnaires to biomarkers

14:45–15:15 Challenges in (poly)phenol intake assessment: shall we focus on exposure? Prof Ana Rodriguez-Mateos, Kings College London

15:15–15:30 Profiling flavan-3-ol content of foods and beverages consumed in the UK- Pengbo Wang, King's College London (UK)

15:30–15:45 Effect of brewing methods on coffee phytochemical composition: quantifying the variance of “a cup of coffee”. Tijesu Akeredolu, University of Reading (UK)

15:45–16:00 How well do dietary assessment tools capture (poly)phenol intake? A comparison of 24 dietary recalls, questionnaires and biomarkers - Dr Najiah Kamarunzaman, King's College London (UK)

16:00–16:45 RSC Food Group Early Career Medal lecture: From bench to bedside: clinical translation of bioactive food components in metabolic regulation- Dr Hammad Ullah, Department of Pharmacy, COMSATS University Islamabad, Abbottabad Campus, Pakistan.

16:45–17:00 Early Career Researcher Awards and Concluding remarks