The 1st International Conference on

FOOD BIOACTIVES & HEALTH

13-15 September 2016

Programme and Abstracts

www.fbhc2016.com

Welcome to all of our Bioactive friends!

We are excited to welcome you to the 1st International Conference on Food Bioactives and Health (FBHC2016) on 13-15 September 2016 in Norwich.

FBHC is the first forum to bring together researchers from various scientific communities to present the latest research and discuss common themes and challenges to understanding the impacts of food bioactives on health. The scientific committee have planned a varied and interesting programme which we hope you enjoy. We are proud to welcome experts on polyphenols, glucosinolates, fish oils, carotenoids, bioactive peptides and many other types of bioactives.

We hope this will become an important international forum to inform and optimise our collective understanding of bioactive health benefits and to support the development of functional foods and health claims.

We have located the social programme in Norwich to help you explore and experience our city full of history, character and charm.

Whilst you are here why not try to introduce some Norfolk dialect to your conversations and questions?
"Thas ryte that is" – that's correct
"Hold you hard" – hang on a moment
"Lend us a lug" – listen
"Loada ole squit" – utter nonsense
Enjoy!

The Organising Committee

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Scientific Committee

Polyphenols

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Aedin Cassidy,
University of East Anglia, UK

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Daniele Del Rio,
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Francisco Tomas-Barberan,
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Glucosinolates

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Elizabeth Jeffery,
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Fish Oils

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Food Databanks

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Inter-individual variability in response to the intake of flavonols on blood lipid levels:a meta-analysis of randomized controlled human trials

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Cardiovascular diseases (CVD) continue to be the leading cause of morbidity and mortality in most developed countries [1]. Several epidemiological studies have linked flavonols with decreased risk of stroke [2] and CVD [3], whilst human intervention studies have shown improvements in several biomarkers of CVD risk after flavonol consumption [4]. However, some heterogeneity in the individual physiological responses to the consumption of these compounds has been identified. For example, age and stage of hypertension seem to be important factors influencing the blood pressure lowering effect of quercetin [5, 6]. This meta-analysis aims to analyse the effect of flavanol intake on blood lipids, one of the major biomarkers of CVD risk, and factors affecting the inter-individual variability.

A systematic search was conducted in PubMed, Web of Science, Scopus and trial registry platforms. Only human randomized controlled trials with measured cardiometabolic outcomes were selected for data extraction of the measured outcomes, individual factors of the participants, characteristics of the study, and study quality. From 671 screened references, 19 studies were selected for data extraction and 16 studies were used for meta-analysis on total cholesterol, LDL, HDL and triacylglycerides (TAG). Inter-individual variability was assessed by subgroup analysis on BMI, age, sex, country and health status. Estimated intervention/control standardized mean differences suggested that consumption of flavonols was associated with significant reductions in total cholesterol (-0.180 mmol/L, 95% CI -0.307, -0.053), LDL (-0.219 mmol/L, 95% CI -0.350, -0.088) and TAG (-0.280 mmol/L, 95% CI -0.408, -0.151) and a significant increase in HDL (0.235 mmol/L, 95% CI 0.104, 0.365). Subgroup analysis showed a more pronounced effect in Asian countries and in participants with normal baseline lipid levels, compared to borderline and high baseline values. Results suggest that ethnicity and health status may influence the effect of flavonol intake on blood lipid levels.

References

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Acknowledgments

The present work was conducted within COST Action FA1403 – POSITIVe. AGS is holder of a 'Juan de la Cierva' contract from the Spanish Ministry of Economy and Competitiveness (MINECO). RM is supported by the BacHBerry project (FP7-613793). RM and PP are grateful to iNOVA4Health Research Unit (LISBOA-01-0145-FEDER-007344). University of Barcelona is grateful to MINECO for the JPI-HDHL-FOODBALL project (PCIN-2014-133-MINECO-Spain) and to the Generalitat de Catalunya's Agency AGAUR for the grant 2014SGR1566.