### Oral Programme

**Monday 10th September**

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<th>Time</th>
<th>Session</th>
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<td>08:00</td>
<td>Conference registration</td>
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<tr>
<td>09:00-09:10</td>
<td><strong>Conference Opening</strong></td>
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<td>09:10-10:40</td>
<td><strong>Session 1 – Theme 1: Mechanisms and individual variation in uptake</strong></td>
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<tr>
<td>09:10-09:45</td>
<td><strong>[PL01] Vitamin B12 bioavailability and utilisation</strong></td>
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<td>09:45-10:20</td>
<td><strong>[PL02] Factors affecting the bioavailability of (poly)phenols: Implications for health benefits</strong></td>
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<td>10:20-10:40</td>
<td><strong>[ST01] Examining the effect of inflammation on hepcidin and iron bioavailability in iron-deficiency anemia: a case-control study in Moroccan women</strong></td>
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<td>10:40-11:10</td>
<td><strong>Coffee break and poster viewing</strong></td>
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<td>11:10-12:45</td>
<td><strong>Session 2 – Theme 1: Mechanisms and individual variation in uptake</strong></td>
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<td>11:10-11:45</td>
<td><strong>[PL03] Host factors explaining individual variation in carotenoid bioavailability</strong></td>
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<td>11:45-12:05</td>
<td><strong>[ST02] Bioavailability of Aronia berry (poly)phenols after acute and regular consumption</strong></td>
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<td>12:45-13:40</td>
<td><strong>Lunch</strong></td>
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<td>12:45-13:40</td>
<td><strong>Poster session 1</strong></td>
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<td>13:40-14:10</td>
<td><strong>Poster talk session 1</strong></td>
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<td>14:10-15:45</td>
<td><strong>Session 3 – Theme 2: Role of the microbiome in bioavailability</strong></td>
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<td>14:10-14:45</td>
<td><strong>[PL04] The role of the gut microbiome in iron bioavailability and safety</strong></td>
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<td>14:45-15:05</td>
<td><strong>[ST05] Oligomeric procyanidins are a poor source of gut microbiota-derived hydroxyphenyl-valerolactone metabolites: A randomized, placebo-controlled human intervention trial</strong></td>
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<td>15:05-15:25</td>
<td><strong>[ST06] A probiotic iron supplement increases ferric iron and up-regulates the ferric reductase Dcytb in human Caco-2-HT29 MTX co-cultures</strong></td>
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</table>
Salivary and gut microbiomes play a significant role in in vitro oral bioaccessibility and intestinal absorption of arsenic from food.

M. Calatayud- Arroyo*1, C. Xiong2, K. Francesconi2, T. Van de Wiele1, 1Ghent University, Belgium, 2University of Graz, Austria

Coffee break and poster viewing | Foyer and Gallery

Session 4 – Theme 3: Biofortification | Auditorium
Session chair: Janet King (Children’s Hospital Oakland Research Institute, USA)

[PL05] Food components, food processing and host factors influencing iron bioavailability from biofortified foods
Richard Hurrell, ETH-Zurich, Switzerland

[PL06] Vacuolar sequestration of iron in the endosperm of the grain increases the iron content and bioavailability of white wheat flour
Janneke Balk, JIC, Norwich, UK

[ST08] Iron absorption from a novel iron-enriched fungal fortificant in humans using stable isotope methodology
A.E. Bries1, R.F. Hurrell2, M.B. Reddy*1, 1Iowa State University, USA, 2ETH Zurich, Switzerland

End of day

Tuesday 11th September

Session 5 – Theme 4: Heath impacts and safety | Auditorium
Session chair: Ian Johnson (Quadram Institute Bioscience, Norwich, UK)

[PL07] Evidence of the impact of food fortification programs on status and functional outcomes
Lynnette Neufeld, GAIN, Switzerland

[ST09] Turning phytates into a natural iron delivery system
E. Habeych*, N. Galaffu, Nestlé Research Center, Switzerland

[PL08] Potential health benefits of increasing sulphur uptake and sulphur-containing compounds in Brassica vegetables
Richard Mithen, Quadram Institute Bioscience, Norwich, UK

Coffee break and Poster viewing | Foyer and Gallery

Session 6 – Health impacts and safety Special Session: The risks and benefits of folic acid fortification | Auditorium | Session chair: Richard Hurrell (ETH-Zurich, Switzerland)

Introduction of the topic and comments from the Chair

[PL09] Vitamin B9 may not always be benign
Irwin H. Rosenberg, Tufts University, Medford, USA

[PL10] The health effects of folic acid fortification
Helene McNulty, University of Ulster, UK

Questions and discussion led by an expert panel
Panel: Irwin Rosenberg (Tufts University, Medford, USA), Helene McNulty (University of Ulster, UK); Lindsay Allen (USDA, ARS Western Human Nutrition Research Center, USA); Paul Finglas (Quadram Institute Bioscience, Norwich, UK)

End of day | Free time

Please note that no lunch is being provided on Tuesday. Delegates will have time to visit the city of Norwich, the Norfolk Broads, the Norfolk coast or other sites of interest. Leaflets with information about some local places of interest will be available at the conference reception or you can use Tourist Information (https://www.visitnorwich.co.uk/shopping/shops/listing/tourist-information-centre/)
Wednesday 12th September

09:00-10:35 Session 7 – Theme 5: Public health nutrition | Auditorium
Session chair: Irwin Rosenberg (Tufts University, Medford, USA)

09:00-09:35 [PL11] Is vitamin D deficiency of public health significance?
Kevin Cashman, University College Cork, Ireland

09:35-09:55 [ST10] An isotope dilution method to assess iron requirements and changes in iron status in Swiss women
C. Speich1, C.I. Cercamondi1, D. Moretti1, C. Zeder1, G.M. Brittenham2, M.B. Zimmermann1,
1ETH Zuerich, Switzerland, 2Columbia University, USA

09:55-10:15 [ST11] Sodium selenate supplementation effectively delivers selenium to the central nervous system: Results from a randomized controlled pilot-trial in Alzheimer’s disease
B.R. Cardoso1, 2, B.R. Roberts2, T.J.O. O’Brien3, D.J. Hare2, A.I. Bush2, 1Deakin University, Australia, 2Florey Institute of Neuroscience and Mental Health, Australia, 3Royal Melbourne Hospital, Australia

10:15-10:35 [ST12] Bioavailability of vitamin B12 from dairy products using a pig model
D. Bueno Datto*, I. Audet, C.L. Girard, J.J. Matte, Agriculture and Agri-Food Canada, Canada

10:35-11:15 Coffee break and Poster viewing | Foyer and Gallery

11:15-12:30 Session 8 – Theme 2: Role of the microbiome in bioavailability | Auditorium
Session chair: Kevin Croft (University of Western Australia, Perth)

Daniele Del Rio, University of Parma, Italy

11:50-12:10 [ST13] Consumption of galacto-oligosaccharides increases iron absorption from ferrous fumarate but not from ferrous sulfate: A stable isotope study in young Swiss women
F.M.D. Jeronese*, M.B. Zimmermann, C. Zeder, I. Herter-Aeberli, Laboratory of Human Nutrition, ETH Zürich, Switzerland

12:10-12:30 [ST14] Quercetin bioavailability from broccoli and its impact on sulforaphane bioavailability
Y. Wang*, M. Berhow2, X. Liu1, M.J. Miller1, E.H. Jeffery1, 1University of Illinois Urbana, USA,
2United States Department of Agriculture, ARS, USA

12:30-13:30 Lunch and Poster Session 2 | Foyer and Gallery

13:30-14:00 Poster talk session 2 | Auditorium

14:00-16:00 Session 9 – Theme 3: Biofortification | Auditorium
Session chair: Silvia Cozzolino (University of Sao Paulo, Brazil)

14:00-14:35 [PL13] Potential biomarkers of the efficacy of zinc biofortification
Janet King, CHORI, Oakland, USA

14:35-15:00 [PL14] Novel genetic engineering strategies for iron and zinc biofortification of rice and wheat grains
Navreet Bhullar, ETH-Zurich, Switzerland

15:00-15:20 [ST15] Iodine in milk and dairy products in relation to iodine in feed - contribution to iodine intakes in Swiss adults
O.L. van der Reijden*, V. Galetti1, C. Zeder1, A. Krzystek1, I. Herter-Aeberli1, M.B. Zimmermann1, M. Haldimann2, M. Kreuzer1, J. Berard1, P. Schlegel1, 1ETH Zurich, Switzerland, 2Federal Food Safety and Veterinary Office, Bern, Switzerland, 3Agroscope, Posieux, Switzerland

15:20-15:40 [ST16] β-Cryptoxanthin from specialty biofortified orange maize is highly bioavailable in humans
S.A. Tanumihardjo*, N. Palacios-Rojas2, C. Davis1, E. Heying1, T. Titcomb1, M. Sowa1, 1University of Wisconsin-Madison, USA, 2International Maize and Wheat Improvement Center (CIMMYT), Mexico

15:40-16:00 [ST17] In vitro bioaccessibility of potato iron as compared to iron from black, white and fava beans
C. Andre1, G. Burgos2, J. Ziebel1, C. Guinard1, J. Hausman1, T. zum Felde2, 1Luxembourg
16:00-16:30 Coffee break and Poster viewing | Foyer and Gallery

16:30-17:40 Session 10 – Theme 1: Mechanisms and individual variation in uptake | Auditorium
Session chair: Michael Zimmerman (ETH-Zurich, Switzerland)

16:30-17:00 [PL15] How far have we come and where next in understanding polyphenol metabolism and bioavailability?
Paul A Kroon, Quadram Institute Bioscience, UK

17:00-17:20 [ST18] Formulation of geraniin-phospholipid complex for improved oral bioavailability
S. Elendran1,2,1, S. Muniyandy3, U.D. Palanisamy1, Monash University, Malaysia, 2University of Reading Malaysia, Malaysia, 3Fatima College of Health Sciences, Malaysia

17:20-17:40 [ST19] Impact of food structure on lipophilic micronutrients bioavailability: A human study
B. Gleize1, M. Hiolle2, N. Meunier2, B. Pereira4, R. Richard4, I. Savary-Auzeloux5, C. Buffière5, C. Caris-Veyrat1, F. Nau2, E. Reboul2, UMR 408 INRA-Université d’Avignon SQPOV, France, 2UMR 1253 INRA-Agrocampus Ouest STLO, France, Centre de Recherche en Nutrition Humaine d’Auvergne, France, *CHU de Clermont-Ferrand, France, 3UMR 1019 INRA-Université d’Auvergne UNH, France, 4Agrocampus Ouest, France, 5UMR 1260 INRA-INSERM-Université Aix-Marseille, France

17:40-18:00 [ST20] Bioavailability of the main groups of coffee phytochemicals under different patterns of consumption and taking into account inter-individual differences due to gender and smoking
P. Mena*, M. Tassotti, L. Bresciani, D. Martini, A. Rosi, M. Antonini, A. Dei Cas, R. Bonadonna, F. Brighenti, D. Del Rio, University of Parma, Italy

19:30 Conference Dinner | Norwich City Football Club

Thursday 13th September

09:00-10:30 Session 11 – Theme 2: Role of the microbiome in bioavailability | Auditorium
Session chair: Sue Fairweather-Tait (University of East Anglia, Norwich, UK)

09:00-09:35 [PL16] TBC

09:35-10:10 [PL17] Role of the microbiome in bioavailability of dietary polyphenols
Kevin D Croft, University of Western Australia, Australia

10:10-10:30 [ST21] Human and gut microbiota metabolites from purple potato anthocyanins
J. Jokioja1,2, K.M. Linderborg1, B. Yang1, M. Philo2, J. Percival2, P. Kroon2, University of Turku, Finland, Quadram Institute Bioscience, UK

10:30-11:00 Coffee break and Poster viewing | Foyer and Gallery

11:00-12:50 Session 12 – Theme 5: Public Health Nutrition | Auditorium
Session chair: Lindsay Allen (USDA, ARS Western Human Nutrition Center, Davis, USA)

11:00-11:35 [PL18] EFSA’s approach to dealing with bioavailability in setting Dietary Reference Values
Susan Fairweather-Tait, University of East Anglia, UK

11:35-12:10 [PL19] Polyphenol metabolome: From human exposure to risk of diseases
Augustin Scalbert, IARC, Lyon, France

12:10-12:30 [ST22] Galacto-oligosaccharides with β-1,6/3 glycosidic linkages have preventive role against colorectal cancer in rat model
S. Iqbal*, T. Qamar, M. Nasir, H. Rehman, University of Veterinary & Animal Sciences, Pakistan

12:30-12:50 [ST23] Daily consumption of berries as a part of a habitual red meat diet for four weeks changes gut microbiota and biomarkers of colon cancer in healthy volunteers
E. Päivärinta, M. Marttinen, M. Määttänen, T. Koivumäki, C. Jiang, T. Ingman, K. Lehtinen, M. Mutanen, A. Salonen, A-M. Pajari*, University of Helsinki, Finland

12:50-13:10 Closing ceremony | Auditorium

13:10 Lunch