



8th International Conference on Food Digestion

Porto, 9-11th April 2024

Sheraton Hotel & spa

PROGRAM

Tuesday, 9th April 2024

13:00 **Registration Open**

14:00 - 14:20 **Opening session**

Day 1
Part 1

Oral processing and sensory properties of foods

Chairs: Isabel Ferreira and Didier Dupont

14:20 - 15:00 **Invited Speaker Anwesha Sarkar, UK,**
"3D tongue-like surface: A quantitative tribology tool to probe oral processing"

15:00 - 15:50 Oral communication | Topic 1

15:00 - 15:10 C1 | Influence of addition of alginate hydrogels on oral processing behaviour and sensory perception of different food matrices
Speaker: Alvaro R. Garcia-Fuentes

15:10 - 15:20 C2 | Mechanisms behind fat related perception in plant-based burgers varying in fat type.
Speaker: Marine Devezeaux De Lavergne

15:20 - 15:30 C3 | The influence of oral processing behaviour on nutrients digestion.
Speaker: Markus Stieger

15:30 - 15:40 C4 | Quantitative ultrasound to explore tactile perceptions of food elicited by tongue-palate friction: a biomimetic approach.
Speaker: Vincent Mathieu

15:40 - 15:50 Panel Discussion

15:50 - 16:30  Coffee Break + Posters Session 1 (Topic 1 + Topic 4 + Topic 2 (partial))



Day 1
Part 2

Food structures, digestion and imaging technologies

Chairs: Susana Casal and Frédéric Carrière

16:30 - 17:45 Oral communication | Topic 4

16:30 - 16:40 C5 | Fibre, regardless of its structure, increases PYY release
Speaker: Aygul Dagbasi

16:40 - 16:50 C6 | Intragastric behavior of an experimental infant formula may better mimic human milk than a control formula
Speaker: Paul Smeets

16:50 - 17:00 C7 | Quantifying intestinal lipolysis with Magnetic Resonance Imaging using fresh cream
Speaker: Ruoxuan Deng

17:00 - 17:10 C8 | Impact of the microstructure of two beef co-products on postprandial plasma amino acid kinetics
Speaker: Rozenn Le Foll

17:10 - 17:20 C9 | Controlling white rice glycaemic index by structuring with gellan gum: MRI study in vivo
Speaker: Luca Mariani

17:20 - 17:30 C10 | Scattering techniques to study the nanostructure and digestion mechanism of novel foods
Speaker: Marta Martínez-Sanz

17:30 - 17:45 Panel Discussion

17:45 - 18:25 **Invited Speaker Harjinder Singh, New Zealand**
"Gastric structuring of food materials to optimise nutrient absorption: challenges and opportunities"

18:25 - 18:30 Introduce **INFOGEST BR** - Latin American Branch

19:00 - 20:00 **Welcome reception at Sheraton Hotel**



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Wednesday, 10th April 2024

Day 2
Part 1

Bioaccessibility/absorption of beneficial and harmful compounds

Chairs: Isidra Recio and Miguel Faria

08:30 - 09:50

Oral communication | Topic 2

08:30 - 08:40

C11 | Quantifying the impact of gut microbial metabolism on the bioavailability and pharmacokinetics of stevioside
Speaker: James Chun Yip Chan

08:40 - 08:50

C12 | Assessing the impact of in vitro gastrointestinal digestion on the bioaccessibility and bioactivity of polyphenols-rich extracts from citrus by-products
Speaker: Ana A. Vilas-Boas

08:50 - 09:00

C13 | Effects of enzymatic hydrolysis, the Maillard reaction and in vitro gastro-intestinal digestion on antioxidant properties of feather keratin
Speaker: Antoni Taraszkiewicz

09:00 - 09:10

C14 | Gastrointestinal lipid handling of an infant formula with large phospholipid coated lipid droplets is different from standard infant formula and closer to human milk
Speaker: Gabriel G. M. Thomassen

09:10 - 09:20

C15 | Bioaccessibility of Rice Mycotoxins: A Comparative in vitro Study of Adult and Elderly Digestion
Speaker: Carolina Sousa Monteiro

09:20 - 09:30

C16 | Release of bioactive compounds from microcapsules during in vitro digestion
Speaker: Trinidad Perez-Palacios

09:30 - 09:50

Panel Discussion

09:50 - 10:30

Invited Speaker Manuela Pintado, Portugal
"In vitro food digestion as tool for assessing bioactivity and bioaccessibility"

10:30 - 11:10



Coffee Break + Posters session 2 (Topic 2)



Day 2
Part 1
(continuation)

Bioaccessibility/absorption of beneficial and harmful compounds

Chairs: Beatriz Miralles and Pasquale Ferranti

11:10 - 12:30

Oral communication | Topic 2

11:10 - 11:20

C17 | Digestion-released egg peptides induce GLP-1 secretion and modulate post-prandial glycemia
Speaker: Santiago María Vivanco-Maroto

11:20 - 11:30

C18 | In vitro gastrointestinal release kinetics of various amino acids encapsulated in solid lipid particles
Speaker: Sebastien Marze

11:30 - 11:40

C19 | The potential health benefits of betalain pigments – evidence from in vitro and in vivo studies
Speaker: Christine Bosch

11:40 - 11:50

C20 | Assessment of the protein quality and digestibility in plant-based meat analogues
Speaker: Tullia Tedeschi

11:50 - 12:00

C21 | Vitamin bioaccessibility of foods fermented with riboflavin-overproducing bifidobacteria
Speaker: Patricia Ruas-Madiedo

12:00 - 12:10

C22 | Microbial Enzymes Enhance Macronutrient Digestibility in a Dynamic Digestion Simulation
Speaker: Sean Garvey

12:10 - 12:30

Panel Discussion

12:30 - 14:00



Lunch time (poster session change)



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Day 2
Part 2

***In vitro, in vivo and in silico* models of digestion and absorption**

Chairs: Joana Costa and André Brodkorb

14:00 - 15:20	Oral communication Topic 3
14:00 - 14:10	C23 Amylase activity assay evaluation and optimization: an INFOGEST international ring trial Speaker: Daniela Freitas
14:10 - 14:20	C24 The in vitro dynamic digestion : a suitable model to mimic the in vivo digestion of infant foods in terms of food deconstruction and protein hydrolysis Speaker: Amelie Deglaire
14:20 - 14:30	C25 MiGut - a scalable triple-stage gut model system Speaker: William Davis Birch
14:30 - 14:40	C26 Getting the biliary surfactants right for physiological relevance of in vitro digestion Speaker: Adam Macierzanka
14:40 - 14:50	C27 Pioneering In Vitro Models of the Immature Gut Barrier for Advancing Infant Formula Speaker: Francesca Bietto
14:50 - 15:00	C28 Evidence of increased gluten-induced perturbations in the nucleophilic tone and detoxifying defences of intestinal epithelial cells impaired by gastric dysfunction Speaker: Sara Da Silva
15:00 - 15:20	Panel Discussion

15:20 - 16:00 **Invited Speaker John Van Camp, Belgium**
"In vitro bioavailability and impact of food-derived amyloid-like protein fibrils on health-related markers"

16:00 - 16:40  Coffee Break + Posters session 3 (Topic 3)



Day 2
Part 2
continuation

***In vitro, in vivo and in silico* models of digestion and absorption**

Chairs: Isabel Mafra and Alfonso Clemente

16:40 - 18:00	Oral communication Topic 3
16:40 - 16:50	C29 Development of in silico prediction model for true ileal protein digestibility Speaker: Takuya Kikuchi
16:50 - 17:00	C30 Assessing Rat Intestine Extract for Polyphenol Deglycosylation in Apple Tissue via INFOGEST Speaker: Pablo Gallego Lobillo
17:00 - 17:10	C31 An INFOGEST international consensus static in vitro digestion model adapted to the general older adult population and its application to dairy products Speaker: Anaïs Lavoisier
17:10 - 17:20	C32 Gastric digestion of skimmed milk using a NEar Real Digestive Tract (NERDT) Speaker: Jiajun Feng
17:20 - 17:30	C33 International standardization process of the in vitro digestibility method based on the static INFOGEST method Speaker: Lotti Egger
17:30 - 17:40	C34 In Silico Exploration of Gastric Chemo-Fluid Dynamics: A Focus on Protein Hydrolysis Speaker: Nadun Palmada
17:40 - 18:00	Panel Discussion
18:30 - 19:00	Buses leave Hotel for Cultural Dinner venue

20:00

Cultural Dinner




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Thursday, 11th April 2024

Day 3 Part 1	Impact of diet on gut microbiota <i>Chairs: Linda Giblin and Sara Cunha</i>
09:00 - 10:05	Oral communication Topic 5
09:00 - 09:10	C35 Protein ingredient quality of infant formulas impacts gut physiology and microbiota in mini-piglets used as a human infant model Speaker: Amélie Deglaire
09:10 - 09:20	C36 Modulatory effects on gut microbiota of simulated gastrointestinal digests from microalgae Speaker: Samuel Paterson
09:20 - 09:30	C37 Brazilian Propolis Microencapsulation: Effects on biological activities and gut modulation Speaker: Ana Sofia Saliba
09:30 - 09:40	C38 Unravelling the full therapeutical potential of polyunsaturated fatty acids: a complete study of omega-3 and conjugated fatty acids bioaccessibility, bioavailability prediction and impact in gut microbiota. Speaker: Ana Sofia Salsinha
09:40 - 09:50	C39 Particle size of barley husk influences phenolic acid release, as well as microbiota succession and short chain fatty acid production in vitro Speaker: Sofia Ntouranidi
09:50 - 10:05	Panel Discussion
10:05 - 10:45	Invited Speaker Andrea Gianotti, Italy "Role of food formulation and processing on the gut microbiome mediated health and diseases: how in vitro approaches can explain causalities and mechanisms "
10:45 - 11:30	 Coffee Break + Posters session 4 (Topic 5) 
Day 3 Part 1 continuation	Impact of diet on gut microbiota <i>Chairs: Isabel Ferreira and Miguel Faria</i>
11:30 - 12:20	Oral communication Topic 5
11:30 - 11:40	C40 Tryptophan catabolism by gut microbiota is modulated by the food matrix and the diet Speaker: Edoardo Capuano
11:40 - 11:50	C41 Implications of Polyphenol Binding on the Prebiotic Effect of Plant Cell Walls and Resulting Catabolites Speaker: Julia Doris Bechtner
11:50 - 12:00	C42 Effect of pesticide use and sprouting inhibitor on potato crops on gut microbiota and hepatic gene expression in mice Speaker: Sandy Theysgeur
12:00 - 12:10	C43 Can Phlorotannins Navigate the Gastrointestinal Tract? Unraveling Gut Microbiota Modulation and Structural Transformations Speaker: Marcelo Catarino
12:10 - 12:20	Panel Discussion
12:20 - 12:40	INFOGEST Update: Didier Dupont
12:40 - 13:00	Awards and closing session
13:00 - 15:00	 Lunch time
	WG meetings
15:00 - 16:30	WG1 - In vitro models of digestion - <i>Conference Room</i> WG5 - Digestive Amylases and Starch Digestion - <i>Room 1</i> WG7 - Imaging - <i>Room 2</i>
16:30 - 18:00	WG2 - Food Interaction Meal Digestion - <i>Room 1</i> WG3 - Absorption Models - <i>Conference Room</i> WG4 - Digestive Lipases and Lipid Digestion - <i>Room 2</i>