EFFoST2023 Conference - Oral Programme Monday 6 November 2023 08:30-18:30 Registration 08:30-10:00 08:30-08:45 08:30 - 09:00 Registration 08:45-09:00 09:00-09:15 09:00 - 09:15 Welcome Young EFFoST council 09:15-09:30 09:15 - 10:00 Short talks Chair: Felix Schottroff, University of Natural Resources and Life Sciences 09:30-09:45 (BOKU), Vienna, Young EFFoST Chair 09:45-10:00 10:00-10:30 10:00-10:30 Refreshment Break 10:30-12:30 oung EFFoST Day 2023 10:30-10:45 10:30 - 12:30 Career path insights: industry, academia and non-profit organizations 10:45-11:00 - Yelko Rodriguez, University of Valencia, Spain 11:00-11:15 - Amparo Querol, IATA-CSIC, Spain - Mª José Muñoz Garcés, AIMPLAS -11:15-11:30 Technological Institute of Plastics, Spain - María Blázquez Blázquez, 11:30-11:45 FarmaMundi NGO, Spain -Representative from Importaco, Spain 11:45-12:00 12:00-12:15 12:15-12:30 12:30-14:00 Young EFFoST Day Lunch Auditorium 1 14:00-14:30 EFFoST Welcome & Opening Session

14:00-14:15	Welcome to the 37th EFFoST Interna Dolores O'Riordan, President of the Ef Francisco Barba, Univeristy of Valenci	FFoST Board					
14:15-14:30	Welcome to Valencia, Spain Carlos Hermenegildo Caudevilla, Vice	-rector of research, University of Valence	cia				
14:30-16:00	Plenary Session 1: Food, Microbes an Chairs: Francisco J. Barba & Maria Car	d Industry 4.0: A roadmap towards 20 men Collado	30 Agenda				
14:30 - 15:00		the future of a healthier and more sus					
15:00 - 15:30	(PL1.2) Doing Good by Doing Food, Beatriz Jacoste, Director of KM ZERO,	Spain					
15:30 - 16:00		gae and agrifood by-products against A or at the CSIC and director of the Food		domics,			
16:00-16:30	Refreshment Break Exhibition area,	Networking session of the EFFoST Wo	rking Group on Sustainable Food Syste	ms EFFoST stand			
Room	Auditorium 1	Auditorium 2	Auditorium 3	SC 1 + 2	SC 3 + 4	SC 6 + 7	SC 8
16:30-18:30	Session 1: Innovative food processing technologies Chairs: Henry Jäger & Olga Martín Belloso	Session 2: Profiling and identification of novel compounds Chairs: Alejandro Cifuentes & Elena Ibañez	Session 3: Food microbes and fermentation Chairs: Gabriel Vinderola & Maria Carmen Collado	Session 4: Innovative food processing technologies Chairs: Urszula Tylewicz & Kemal Aganovic	Special Session 1: Healthy Foods for all – the essential role of food processing Chairs: Lilia Ahrné & Dolores Oriordan	Special Session 2: ENOUGH project: Technologies, tools and methods to achieve climate neutral food businesses Chair: Edward Sliwinski	Special session 3: Career and Personal Development for Young Scientists and Industry Professionals - Kickoff Meeting of the EYE Mentorship Programme
16:30-16:45	(KN1.1) Towards predictive control of extrusion processing of plant-based food systems Adrian Tica, ETH Zurich, Switzerland	(KN2.1) Relevance of novel bioactive peptides obtained from meat and fish co-products Fidel Toldra, IATA-CSIC, Spain	(KN3.1) Next-Generation Food Microbiome Research: Approaches for characterizing microbial communities in foods and the food chain	(KN4.1) Influence of extraction process on microalgae protein fractionation and functionality for food applications Byron Perez, Singapore ETH Centre,	(51.1) The link between food processing and food quality: can we go beyond the obvious? Vincenzo Fogliano, Wageningen University & Research, Wageningen	16:30 - 16:50 (52.1)	(S3.1) Introduction of EHEDG Adwy van den Berg, EHEDG
16:45-17:00			Paul Cotter, Teagasc, Ireland	Singapore		16:50 - 17:10 (52.2) Estimation of the UK 2019 Baseline Year's Energy Demand and Emissions	(53.2) Introduction of Young EFFoST Helen Saar, Sophie Kendler, Felix Schottroff, Young EFFoST
17:00-17:15	(O1.2) Oxidative Stability of β- Lactoglobulin-stabilized Emulsions affected by Phenolic Acid Derivatives Helena Kieserling, TU Berlin, Germany	(02.2) Paradigm shift in bakery formulations: combined sugar and fat reduction improves sensory perception of cakes Stefano Renzetti, Wageningen Food & Biobased Research, Netherlands	(03.2) Fermenting for Health: How Probiotic Fermentation Boosts Wheat and Rye Fiber Benefits Ewa Pejcz, Wrocław University of Economics and Business, Poland	(04.2) Comparing electrostatic separation of soy and lupin: effect of de-oiling by solvent extraction Regina Politiek, Wageningen University & Research, Netherlands	(S1.2) How processing enhances the nutritional value of food products Christoph Hartmann, Nestlé Research, Switzerland	of Cold Storage Using a Bottom-Up Model Xinfang Wang, University of Birmingham, UK	(S3.3) Introduction of the EYE mentorship program
17:15-17:30	O1.3) Does the presence of other amines influence the degradation of histamine by plant-based DAO enzyme? Judit Costa Catala, University of Barcelona, Spain	(02.3) Biopeptides derived from red macroalgae protein and their potential as heart health-promoting functional food ingredients Rafik Balti, Université Paris-Saclay, France	(03.3) Fermentation of plant-based matrices for the development of dairy and cheese-like flavours Helen Saar, Center of Food and Fermentation Technologies (TFTAK), Estonia	(04.3) Citrus fibres for the formulation of Pickering emulsions: a sustainable multiphase system Eleonora Loffredi, University of Milan, Italy		17:10 - 17:30 (S2.3) Technology demonstration to reach climate neutrality in European food industry by 2050 Hanna Dalsvag, SINTEF Ocean, Norway	(53.4) Presentation of LinkedIn Personal Selling approach Richard van der Blom
17:30-17:45	(01.4) Quality of fish balls from organic meagre side streams formulated with of fish protein hydrolysate Silvia Tappi, University of Bologna, Italy	(02.4) Vegetable-fruit mousses enriched with soluble dextrin fibre from potato starch for overweight and obese children Janusz Kapusniak, Jan Dlugosz University in Czestochowa (JDU), Poland	(03.4) Lactic Acid Bacteria Fermentation of Lentil Protein Emulsion and Its Potential for Plant-Based Yoghurt Alternatives Theresa Boeck, University College Cork, Ireland	(O4.4) Is it safe to cut off mold from bread? Nicole Ollinger, FFoQSI, Austria	(S1.3) Dialogue between food scientists and nutritionists and the nutritional recommendations Elisabet Rytter, The Swedish Food Federation, Sweden	17:30 - 17:50 (S2.4) Energy savings of dynamic controlled atmosphere storage of pear fruit Pieter Verboven, KU Leuven, Belgium	
17:45-18:00	(O1.5) Cold plasma treatment to obtain safe minimally processed oysters (CRASSOSTREA GIGAS) Urszula Tylewicz, University of Bologna, Italy	(02.5) Creation of food structures by means of powder based additive manufacturing technique, Martijn Noort, Wageningen University & Research, Netherlands	(03.5) Effect of lactic acid bacteria fermentation on the technological properties of sorghum composite bread Miriam Chiodetti, University Of Parma, Italy	(04.5) Thermophysical Insights for High- Moisture Extrusion Texturization of Plant-Based Proteins: Towards Sustainable Production of Meat Analogues Elisabeth Högg, TU Berlin / Nestlé, Germany		17:50 - 18:10 (S2.5) Improvement of domestic-scale freeze-dryer affordability by implementing vacuum-freezing technology, volumetric heating method and natural-based working fluid	(S3.6) Round table discussion of mentors and mentees, based on few predefined and prepped questions

18:00-18:15	(01.6)	(O2.6)	(O3.6)	(04.6)	(S1.4)	Jakub Chrobak, Silesian University of
	Influence of high-intensity	Agri-Food Waste as Nutritional	The effect of pre-processing, starter	Effects of different extraction on	On the differentiation of processing	Technology, Poland
	ultrasound on technofunctional	Goldmines: Subcritical Water	culture, and temperature on	properties and future applications of	and formulation - impacts on	
	properties of dietary fiber and on	Extraction Technology - Evidence	fermentation of seaweed	cocoa pod husk pectin	consumer-relevant food	
	bioaccessibility of protein	from Two Case Studies	Hanne Dalsvåg, SINTEF Ocean,	Karen Tatiana Salas Calderon,	classification	
,	Ann-Marie Kalla-Bertholdt,	Giorgio Capaldi, University of Turin,	Norway	Surcolombiana University,	Erich Windhab, ETH Zurich,	
	Technical University of Berlin,	Italy		Colombia	Switzerland	
	Germany					
18:15-18:30	(01.7)	(02.7)	(03.7)	(04.7)	(S1.5)	18:10 - 18:30
	Bioactive compound concentration	Recovery of bioactive compounds	Quantification of the number of	Effect of 3D printing conditions on	Panel discussion with all 4	(S2.6)
	in Amaranthus hybridus leaves at	from fish processing side-streams	viable but non-culturable	the development of protein foods	presenters	Policy Gaps and Feasible Policy
	different harvest times	enhanced by Pulsed Electric Fields	Campylobacter jejuni using	Yeison Barrios Rodríguez, Universitat		Interventions in The European Food
	María de L. González-Muñoz,	Ioanna Semenoglou, National	dielectrophoresis with micro-fluidic	Politècnica de València, Spain		Value Chain
	Monterrey Institute of Technology	Technical University of Athens,	device			Inmaculada Martínez-Zarzoso, Georg-
	and Higher Education, Mexico	Greece	Shige Koseki, Hokkaido University,			August-Universität Göttingen,
			Japan			Germany
18:30-20:00	Welcome Reception & Pub Quiz Ex	nibition area & Auditorium 3				

Tuesday 7 Nove	ember 2023						
Room 08:30-10:00	Auditorium 1 Plenary Session 2: Sustainability in fo Chairs: Dolores O'Riordan & Giancarlo						
08:30-09:00	(PL2.1) Healthy and sustainable food through Henry Jäger, BOKU University of Natur	n processing? ral Resources and Life Sciences, Austria	3				
09:00-09:30	(PL2.2) Biotics' in foods: definitions and future Seppo Salminen, University of Turku, I						
09:30-10:00	(PL2.3) 'How'low' – trophic-can we go? Prep Katerina Kousoulaki, Nofima, Norway	pare yourselves to make the most out	of the sea!				
10:00-10:30			m 1 [P1.1] & Multipurpose room 2 [P1				
Room 10:30-12:30	Auditorium 1 Session 5: Development of sustainable food production systems Chairs: Anet Rezek Jambrak & Christoph Hartmann	Auditorium 2 Session 6: Valorization of bioactive compounds from food side streams Chairs: Cristina Juan & Joaquim Calvo	Auditorium 3 Session 7: Food microbes and fermentation Chairs: Seppo Salminen & Maria Carmen Collado	SC 1+2 Session 8: New techniques and technologies for tailored food design Chairs: Gianpiero Pataro & Noelia Betoret	SC 3+4 Special Session 4: Microbes4 Sustainable Foods – Designing future fermented foods, Part 1 Chair: Christophe Courtin & Jan De Vries	SC 6-7 Special Session 5: Sustainable and digital transformation of the spanish agri-food sector for a greener and healthier future Chair: Inés Echeverria Goñi	sc 8
10:30-10:45	(KN5.1) Role of Food Industry 4.0 technologies in enhancing sustainability in agriculture and the food industry	(KN6.1) Intensified processing of almond- and wine-derived leftovers with pulsed electric fields and supercritical CO2	(KN7.1) Locally-sourced microbes in Latin America: from probiotics to the "Live Dietary Microbes" and "Postbiotics" concepts	(KN8.1) Potential of Scattering Tools for Valorization Purposes in the Food Area Amparo López -Rubio, IATA-CSIC,	10:30 - 11:10 (S4.1) Food fermentations – state of the art Yamina De Bondt, KU Leuven, Belgium	10:30 - 10:40 (S5.1) Introduction Elena Gascón Villacampa, CNTA, Spain	
10:45-11:00	Abdo Hassoun, Université du Littoral Côte d'Opale, France	Manuel Salgado-Ramos, University of Valencia, Spain	Gabriel Vinderola, CONICET - Universidad Nacional del Litoral, Argentina	Spain		10:40 - 10:55 (\$5.2) Challenges facing the agri-food sector in Spain Natalia Villalobos, Spanish Ministry of Agricultrue, Fisheries and Food, Spain	
11:00-11:15	Plasma Functionalized Bio-Polymers Based Coating with In-package Plasma Treatment for a Sustainable Poultry Processing Chain Soukaina Barroug, University College Dublin, Ireland	, ,	(07.2) Next-generation prebiotics: Oligosaccharides-protein conjugates for selective targeting of proteins to probiotic bacteria in the colon Stav Peled, Technion - Israel Institute of Technology, Israel	Kwan-Mo You, University Of Leeds, United Kingdom		10:55 - 11:10 (S5.3) Mapping of Spanish biomass resources in the framework of Agri- Food Sector Inés Echeverría Goñi, CNTA, Spain	
11:15-11:30	(05.3) Sustainable technology development at Cosun: Chicory Inulin Process 2.0 Johan Van Den Bergh, Cosun, Netherlands	(O6.3) Lubrication performance of dark chocolate across different length scales and stages of oral processing Siavash Soltanahmadi, University Of Leeds, United Kingdom	(07.3) Utilization of pulse-derived raffinose family oligosaccharides in mixed fermentations to produce sour beer Philipp Garbers, Norwegian University of Life Science, Norway	(08.3) Developing High-Protein, Clean- Label Plant-Based customizable ingredients for novel food product development Nirzar Doshi, Wageningen University & Research, Netherlands	11:10 - 11:30 (S4.2) HealthFerm: Innovative pulse and cereal-based diets for human health and sustainable diets Christophe Courtin, KU Leuven, Belgium	11:10 - 11:25 (S5.4) Innovative combination of technologies and techniques in food processing Jesús J. García Parra, CICYTEX, Spain	

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11:30-11:45	(05.4) Novel Block Cryoconcentration Method Applied to Pomegranate Juice Flor De María Vásquez Castillo, Universidad Politécnica De Catalunya, Spain	(06.4) Sustainable valorisation of legume by-products and marine residuals into novel consumer products-Pathway to market approval Hitika Shah, TU Dublin, Ireland (06.5)	(07.4) Spirulina Reimagined: Harnessing Fresh Microalgae and Fermentation for Nutritious and Tantalizing Gastronomic Creations Helena Martin, CETT Barcelona School of Tourism, Hospitality and Gastronomy, Spain (07.5)	(08.4) In vitro digestion of two protein-rich dairy products in the aging gastrointestinal tract Anaïs Lavoisier, INRAE UMR STLO, France (08.5)	11:30 - 11: 50 (\$4.3) PIMIENTO project: Promoting Innovation of Fermented Foods Christophe Chassard, INRAE, Université Clermont Auvergne, France 11:50 - 12:10	11:25 - 11:40 (SS.5) Control of microbiological risks associated with sustainable production and processing systems Mabel Gil, CEBAS, Spain 11:40 - 11:55	
	How does PEF impact membrane integrity and the volatile profile of broccoli stalks? Sophie Delbaere, KU Leuven, Belgium	Scattering techniques to investigate the nanostructure of polysaccharide based gels and their behaviour upon gastrointestinal digestion Marta Martinez, Institute of Food Science Research (CIAL-CSIC-UAM), Spain	Lactofermentation to design functional foods from sweet potato Marion Nabot, Cirad UMR Qualisud, Université de la Réunion, Réunion	Understanding ole osome structure and their potential uses in foods with advanced properties Costas Nikiforidis, Wageningen University & Research, Netherlands	DOMINO project: Harnessing the potential of fermented foods for healthy and sustainable food systems Stéphane Chaillou, Université Paris-Saclay, INRAE, France	(S5.6) PANACEA: mushroom residues as an alternative source of advanced nutraceuticals Amparo López Rubio, IATA – CSIC, Spain	
12:00-12:15	(O5.6) Exploring the Potential of Solar Cooking: Impact of Parabolic and Box Models on Broccoli Quality Ana Catarina Araújo, Universidade Catolica Portuguesa, Portugal	(O6.6) From rough to smooth: impact of soft shell encapsulation on sensory perception of pea fibres Gabriele D'Oria, University of Copenhagen, Denmark	(O7.6) Quality and nutritional properties of a symbiotic fermented and non-fermented peach and grape juice Maribel Abadias, IRTA, Spain	(O8.6) Upcycling mango peels into a functional ingredient by combining fermentation and enzymatic-assisted extractions Arnau Vilas Franquesa, Wageningen University & Research, Netherlands		11:55 - 12:10 (S5.7) Transferring knowledge and Research results to the business sector Mª Carmen Olivan, SERIDA, Spain	
12:15-12:30	(05.7) Food insecurity in Italy: stakeholders' opinions on the current situation and future development Rungsaran Wongprawmas, University of Parma, Italy	(06.7) Bioaccessibility of polyphenols from tigernut pulp and its functional properties Cristina Juan García, University of Valencia, Spain	(O7.7) Characterizing sweet potato by- product extracts from innovative processing techniques and assessing their prebiotic potential Manuel Bernabeu, IATA-CSIC, Spain	(08.7) Screening of bioactive peptides from winemaking industry by-products: protein hydrolysis optimization and antihypertensive effects Ariel Fontana, Instituto de Biologia Agricola de Mendoza CONICET,	12:10 - 12: 30 (\$4.5) WHEATBIOME project: Unravelling the potential of the wheat microbiome for the development of healthier, more sustainable and resilient wheat-derived food & feed products	12:10 - 12:30 (55.8) Roundtable table discussion Moderators: Carmen González, Maria José Trinidad, <i>CICITEX, Spain</i>	
				Argentina	Rosa Perez-Gregorio, University of Vigo, Spain		
12:30-14:00	Lunch Poster Session 1 Exhibition	area & Multipurpose room 1 [P1.1] &	Multipurpose room 2 [P1.2, P1.3]	Argentina			
12:30-14:00 Room 14:00-16:00	Lunch Poster Session 1 Exhibition Auditorium 1 Session 9: Innovative food processing technologies Chairs: Petros Taoukis & Lilia Arhné	area & Multipurpose room 1 [P1.1] & Auditorium 2 Session 10: New techniques and technologies for tailored food design Chairs: Mladen Brncic & Gema Nieto	Multipurpose room 2 [P1.2, P1.3] Auditorium 3 Session 11: Food-Microbiota data integration Chairs: Carlotta De Filippo &Manuel Bernabeu	SC 1+2 Session 12: Innovative food processing technologies Chairs: Marco Dalla Rosa & Silvia Tappi		SC 6+7 Special Session 7: Small-Scale, Big Impact - Innovative Approaches for Local Food Processing Chair: Ariette Matser & Jeroen Knol	SC 8
Room	Auditorium 1 Session 9: Innovative food processing technologies	Auditorium 2 Session 10: New techniques and technologies for tailored food design	Auditorium 3 Session 11: Food-Microbiota data integration Chairs: Carlotta De Filippo &Manuel	SC 1+2 Session 12: Innovative food processing technologies Chairs: Marco Dalla Rosa & Silvia	SC 3+4 Special Session 6: Microbes4SustainableFoods— Designing future fermented foods, Part 2 Chair: Christophe Courtin & Jan De	Special Session 7: Small-Scale, Big Impact - Innovative Approaches for Local Food Processing	SC 8
Room 14:00-16:00	Auditorium 1 Session 9: Innovative food processing technologies Chairs: Petros Taoukis & Lilia Arhné (KN9.1) Physical properties of cryogels obtained by ball-milled starch as novel 9-carotene carrier Paola Pittia, University of Teramo,	Auditorium 2 Session 10: New techniques and technologies for tailored food design Chairs: Mladen Brncic & Gema Nieto (KN10.1) Green Separation and Innovative Approach for High Valued Utilization of Bioactive Compounds Zhenzhou Zhu, Wuhan Polytechnic	Auditorium 3 Session 11: Food-Microbiota data integration Chairs: Carlotta De Filippo & Manuel Bernabeu (KN11.1) The first 1000 days of life: the influence of diet and the microbiome Omry Koren, Bar Ilan University,	SC1+2 Session 12: Innovative food processing technologies Chairs: Marco Dalla Rosa & Silvia Tappi (KN12.1) Effect of Pulsed Electric fields and High Pressure on the acceleration of table olives de-bittering George Katsaros, Institute of Technology of Agricultural Products	SC3+4 Special Session 6: Microbes4SustainableFoods— Designing future fermented foods, Part 2 Chair: Christophe Courtin & Jan De Vries 14:00-14:20 (S6.1) "MASTER'ing Fermented Foods Paul Cotter, Teagasc Food Research	Special Session 7: Small-Scale, Big Impact - Innovative Approaches for Local Food Processing Chair: Ariette Matser & Jeroen Knol (57.1) FOX: Food Processing in a BOX. Innovative mild technologies for short food supply chains Ariette Matser Wageningen University & Research,	SC 8

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14:45-15:00 15:00-15:15	(09.3) Deciphering the UV-LED technology as a potential decontamination strategy of poultry meat towards Campylobacter jejuni Arturo B. Soro, Belgian Public Health Institute (Sciensano), Belgium (09.4)	(010.3) Legume proteins and arabinoxylans as emulsifiers to deliver vitamin E and D at intestinal level Ángela Bravo Núñez, Aix-Marseille University, France	(O11.3) A web-based interface for bacterial growth and death prediction in predictive microbiology Kento Koyama, Hokkaido University, Japan (O11.4)	(012.3) Future farms – Barriers of sustainable business models for innovation: The case of Mossagården, Sweden Lena Krautscheid, Lund University, Sweden (012.4)	14:40 - 15:00 (S6.3) HealthFerm project: Processing induced changes in starch, fibre and protein in plant-based dairy alternative "gurt" Kati Katina, University of Helsinki, Finland 15:00 - 16:00	(57.4) Innovative quality analyses and sustainable packaging of fresh fruit and vegetables in a mobile container Leonor Pascual, AINIA, Spain (57.5)	
	Investigation of emulsifying and emulsion stabilization mechanisms of commercial pea protein powders Yuqi Zhang, University of Copenhagen, Denmark	Effect of defatting insect meals in wheat bread formulations Edgar Bottle, Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico	Low-cost culture medium for biomass production of indigenous lactic acid bacteria by using bioreactor Agné Vasiliauskaité, Lithuanian University of Health Sciences, Lithuania	A model-based study on the sustainability of local and/or decentralised food chains Estefania Lopez-quiroga, University of Birmingham, United Kingdom	(S6.4) Roundtable discussion Moderator: Jan de Vries How to improve a sustainable science network for Food Fermentation Technology across Europe Christophe Courtin, Christophe Chassard, Stéphane Chaillou, Susana	Upcycling plant side streams using mild processing: advise of the FOX Processtimator tool on the feasibility of an additional washing step for industrial carrot and ginger juice extraction Martijntje Vollebregt, Joanne Siccama Wageningen Food & Biobased Research, The Netherlands	
15:15-15:30	(O9.5) Formulation of high-value-oil-rich ingredients by citrus pectin and insoluble fiber Marco Panzanini, Università Cattolica Del Sacro Cuore, Italy	(010.5) Physicochemical, textural and sensory properties of custard formulated with quinoa as a novel ingredient Nuria Muñoz Tebar, Universidad Miguel Hernández de Elche, Spain	(O11.5) A Multi-Omic Approach to Food Spoilage and Nutritional Composition Within a Vegetable Food Matrix Kate Porter, Northumbria University, United Kingdom	(012.5) Particle modification to enhance the shelf-life of plant-based milk powders Teresa Kurtz, Hamburg University of Technology, Germany	Soares, Paul Cotter In this interactive discussion, the following issues will be discussied: How to achieve a sustainable network in Food Fermentation Technology Optimizing synergy between the EU	(S7.6) Impact of the FOX approaches: sustainability, business opportunities, consumer engagement - Panel discussion with panel members and the public Liesbet Vranken, KU Leuven,	
15:30-15:45	(09.6) The metabolic response of red bell pepper tissue subjected to US and PEF combined treatment Katarzyna Rybak, Warsaw University of Life Sciences, Poland	(010.6) Application of complexes from phycocyanin and pectin in a model beverage system Stephan Buecker, University of Hohenheim, Germany	(011.6) Al-based surrogate models of digital twins for food and drink manufacturing systems Emmanuel Lwele, Sheffield Hallam University, United Kingdom	(012.6) Seasonal chemical characterization of Ostrea edulis as a potential source of bioactive molecules Francesco Chiefa, University of Ferrara, Italy	projects •Critical steps for fast application of new fermentation technologies in consumer products	Belgium , Björn Moller, Fraunhofer Institute for Systems and Innovation Research ISI, Germany , Ekaterina Salnikova, Aarhus University, Denmark, Ariette Matser, Wageningen University & Research, Netherlands	
15:45-16:00		(010.7) Hazelnuts and walnuts spreads with probiotics: development, characterization, and storage stability Chiara Rossetti, Università Cattolica Del Sacro Cuore, Italy		(012.7) Portable testing system for total antioxidant activity determination in food samples Sara Menendez, Bioquochem, Spain			
16:00-16:30			m 1 [P1.1] & Multipurpose room 2 [P1		SC3+4	505 : 7	50.0
Room 16:30-18:30	Auditorium 1 Session 13: Innovative food processing technologies Chairs: Berta Polanco & Manuel Salgado	Auditorium 2 Session 14: Profiling and identification of novel compounds Chairs: Paula Mapelli Brahm & Ariel Fontana	Auditorium 3 Session 15: In vitro vs in vivo assays: implications on health Chairs: Houda Berrada Ramdani	SC 1+2 Session 16: Application of digital technologies in food chain and food sectors Chairs: Juan Manuel Castagnini & Zeynep Altintas	Special Session 8: GIANT LEAPS project: Filling knowledge gaps on alternative proteins to accelerate the dietary shift Chair: Paul Vos & Lucian Miron	SC 6+7 Special Session 9: Health Grain Forum: From innovation to product development gaining consumer acceptability – building sustainability in food system Chair: Jan de Vries & Silvia Folloni	sc8
16:30-16:45	(KN13.1) Innovative Starch Modification Techniques in Response to Evolving Food Megatrends Mahsa Majzoobi, Royal Melbourne Institute of Technology: RMIT University, Australia	(KN14.1) Engineering protein based scaffolds for cultured meat through advanced production technologies Marcelle Machluf, Technion – Israel Institute of Technology, Israel	(KN15.1) Sustainable food systems lead to healthy life Laxmi Yeruva, United States Department of Agriculture, USA	(KN16.1) Crop yield forecasting using remote sensing: from low to high spatial resolution Belén Franch, University of Valencia, Spain	proteins to accelerate the shift toward healthy and sustainable diets Paul Vos, Wageningen University & Research, Netherlands	(\$9.1) 16:30 - 17:00 Cultivating sustainability: The green promise of grass proteins Kaisu Riihinen, VTT Technical Research Centre of Finland, Espoo, Finland	
16:45-17:00					16:40 - 17:00 (S8.2) Towards the optimization of the dietary shift Matilde Milana, Wageningen University & Research, Wageningen		

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17:00-17:15	(O13.2) Effect of PEF processing on the yield and quality of juice from industrial	(014.2) Functionalization of durum wheat pasta through the incorporation of	(O15.2) How in vitro digestion conditions affect the antibiotic resistance of	(O16.2) Valorisation of a wine co-product to improve the nutritional quality of	17:00 - 17:15 (S8.3) Which alternative proteins could	17:00 - 17:30 (S9.2) Sensory Profiling and Flavor Analysis	
	carrot cultivars	novel protein-rich sources	Salmonella enterica and Listeria	peach and grape juice	help to reduce meat consumption?	of Faba Bean Ingredients and	
	George Dimopoulos, National	(Tenebrio molitor larvae)	monocytogenes	Virginia Prieto, IRTA, Spain	Michael Siegrist, ETH Zurich,	Extrudates	
	Technical University of Athens,	Serena Carpentieri, University of	Sotiria Gaspari, KU Leuven, Belgium		Switzerland	Fabio Tucillo, University of Helsinki,	
	Greece	Salerno, Italy				Helsinki, Finland	
17:15-17:30	(013.3)	(014.3)	(015.3)	(016.3)	17:15 - 17:30	1	
	Energy assessment of red beet	Development of extruded products		Development of functional cookies	(\$8.4)		
	processing	for seniors: Fabrication and in vitro	of dietary lipid digestion-absorption	enriched with chestnut shells	Effective policy briefs and strategies		
	Aleksandra Samardzija, Naturala	digestibility assessment	in children with cystic fibrosis	extract screened by in-vitro and in-	for promoting alternative proteins		
	D.o.o, Croatia	Uri Lesmes, Technion – Israel	Joaquim Calvo-Lerma, Universitat	vivo assays	in EU		
		Institute of Technology, Israel	Politècnica De València, Spain	Diana Pinto, REQUIMTE/LAQV, ISEP -	Hans Verhagen, Food Safety &		
				Polytechnic of Porto, Portugal	Nutrition Consultancy, Netherlands		
17:30-!7:45	(013.4)	(014.4)	(015.4)	(016.4)	17:30 - 17:45	17:30 - 18:00	
	Physiochemical and microbial	Developing contextualized	Lipids and carotenoid from	Spent Coffee Ground as a healthier	(\$8.5)	(\$9.3)	
	quality changes in Norwegian red	computer vision techniques to	oleaginous yeasts grown on	ingredient for functional Shortbread		Advantages and Challenges of Using	
	sea cucumber (Parastichopus	improve controlling of complex	lignocellulose as sustainable food	Cookies	Design for healthier, sustainable	Pulse Flours in Food Applications: A	
	tremulus) during storage	food processes	ingredients	Pasquale Massimiliano Falcone,	ingredients and microstructures	Focus on Sustainability, Protein	
	Dat Trong Vu, The Norwegian	Yizhou Ma, Wageningen University	Volkmar Passoth, Swedish University	Università Politecnica Delle Marche,	Clara Talens, AZTI, Spain	Enrichment, and Nutritional Benefits	
	University Of Science And	& Research, Netherlands	of Agricultural Sciences, Sweden	Italy			
	Technology (NTNU), Norway					Kerstin Burseg, GoodMills Innovation GmbH, Hamburg,	
17:45-18:00	(013.5)	(014.5)	(015.5)	(016.5)	17:45 - 18:10	Germany	
	Design of a manothermosonication		Development of Freeze-drying	A rheological and neuro-	(\$8.6)	Germany	
	prototype for the pasteurisation of	novel foods in the European Union	Tolerant Lactic Acid Bacteria by	psychophysiological approach to	Exploring alternative proteins:		
	liquid whole egg Enrique Beitia, German Institute of	Andrea Germini, EFSA, Italy	Evolutionary Engineering Kim Yeongyeol, World Institute of	assess acceptability and liking of cocoa creams	Challenges and opportunities in processing		
	Food Technologies (DIL e.V.),		Kimchi, South Korea		Nesli Sozer, Anni Nisov, VTT		
	Germany		Killichi, South Korea	of Turin, Italy	Technical Research Centre of		
18:00-18:15	(013.6)	(014.6)	(015.6)	(016.6)	Finland, Finland , Juliane Halm,	18:00 - 18:30	
18:00-18:15	Biotechnological approaches to	Economic and efficient sensors for	(/	Oleogels and bigels as healthy fat	University College Cork, Ireland	(S9.4)	
	improve the polyphenol extraction	the control of ammonia in livestock	Heterotrophic single cell-protein	replacers in laminated pastry		Harvesting Sustainability: Exploring	
	in orange by-products	farms. NH3ControlFarm	protein content and bioaccessibility	products		the Nexus of Whole Grains and	
	María Del Carmen Razola-díaz,	Pilar Campíns-Falcó, University Of	Fabian Abiusi, SFP, ETH Zurich, SFP,	Christine Steinkellner, <i>Leibniz</i>		Alternative Proteins for a Greener	
	University of Granada, Spain	Valencia, Spain	Switzerland	University Hannover, Germany		Future	
10.15 10.20	7 7 7 1			, ,	10:10 10:20	Peter Shewry, Rothamsted Research,	
18:15-18:30	(013.7)	(014.7)	(015.7)	(016.7)	18:10 - 18:30	Hertfordshire, UK	
	The potential of alginate microbeads		Actinidia arguta leaves extract as	New (bio)technological approaches	(S8.7)		
		polyphenols addition on quality and safety of fried snacks		for creation of modern personalized nutrition	Panel discussion: Current regulations and future outlook for		
	indicator in intelligent packaging: Ammonia sensitivity		through in vitro and in vivo assays Ana Silva, REQUIMTE, Portugal	Tamara Meleshko, <i>Uzhhorod</i>	promoting alternative proteins in EU		
	Samira Mohammadalinejhad,	of Environmental & Life Sciences,	Ana Sirva, NEQUIIVITE, PUTTUGUI	National University, Ukraine	Moderator: Paul Vos		
	Norwegian University of Science and			ivational University, Oktaine	Experts: Michael Siegrist, Nesli Sozer,		
	Technology, Norway	Foldila			Hans Verhagen and Clara Talens		
20:00-23:00	Conference Dinner Palau de les Art	<u> </u>		l	Trans vernagen and erara ratells		
20.00-23.00	comercine Dinner Falau de les Art	,					

Wednesday 8 Nove	Vednesday 8 November 2022							
Room	Auditorium 1	Auditorium 2	Auditorium 3	SC 1 + 2	SC 3 + 4	SC 6 + 7	SC 8	
08:30-10:30	Session 17: Responsible consumption and production Chairs: Uri Lesmes & Janna Cropotova	Session 18: Application of digital technologies in food chain and food sectors Chairs: Zamantha Escobedo Avellaneda & Fidel Toldrá	integration	sustainable food production systems		Special session 11: FOODPathS "Mondus Operandy" at the Living Labs. Food for life - Spain Case Study Chair: Hugo de Vries		
08:30-08:45	(KN17.1) Consumer related challenges in responsible food systems Mari Sandell, University of Helsinki, Finland	to the Future of Sustainable Food Zeynep Altintas, Kiel University,	diet-related colorectal cancer risk:	Development of functional brownies enriched with antioxidant extracts and dietary fibre adapted to tcoeliac patients		(S11.1) Welcome EFFOST Hugo de Vries, INRAE, France		

08:45-09:00]				8:50 - 9:10 (\$10.2)	(S11.2) An approach to the FOODPathS	
					Food safety and transparency through cutting edge DNA-based analysis methods Marta Prado, INL, Portugal	project: The mondus operandi of the project Hugo de Vries, Maurine Mames, INRAE, France	
09:00-09:15	(017.2) Flavor tuning of green tea infusion towards hedonic western flavors by fermentation with edible basidiomycetes Marina Rigling, University of Hohenheim, Germany	textured vegetable protein on functionality Thiemo Van Esbroeck, Wageningen University & Research, Netherlands	(019.2) Using biological networks to unravel microbiome-metabolome implications in non-responding celiac disease patients following gluten-free diet Laura Judith Marcos Zambrano, IMDEA Food Institute, Spain	(020.3) Life Cycle Assessment for improved management of durum wheat supply: Italian pasta production scenario Serena Carpentieri, University of Salerno, Italy		(S11.3) The Food for Life -Spain Technology Platform case as a Living Lab Eduardo Cotillas, FIAB, Spain	
09:15-09:30	(O17.3) Exploring the potential of house crickets as food for the future Marios Psarianos, Leibniz-Institut für Agrartechnik und Bioökonomie e. V. (ATB), Germany	(O18.3) Oatmeal concentration's effect on nanoemulsion lipid digestibility and β-carotene bioaccessibility: in vitro semi-dynamic digestion study Anali Parsi, University of Lleido, Spain	(019.3) Impact of V. inaequalis on the apple microbiota and on their aptitude at cider production Raffaele Guzzon, Fondazione Edmund Mach, Italy	(O20.4) Implications of Production Sites and Varieties on Pea Protein Extraction Fatma Dadi, Universita Cattolica Del Sacro Cuore, Italy	09:10 - 09:30 (\$10.3) Transparency and redefining stakeholder roles in the digital age of agrifood supply chain networks Douglas M. Robinson, Wageningen University & Research, Netherlands	(S11.4) The role of the Board of Food for Life- Spain from a Technological Centre point of view Belén Blanco, CARTIF, Spain	
09:30-09:45	(017.4) How organic acids improve the dough rheology and the quality of wholemeal sourdough-type bread Celine Verdonck, KU Leuven, Belgium	(018.4) Effect of ultrasound treatment on fish protein hydrolysate extracted from Atlantic mackerel (Scomber scombrus) Kristine Kvangarsnes, Norwegian University of Science And Technology, Norway	(019.4) Microbial community of Italian cheese produced by Alpine or Valley cow milk Jonas Andersen, Fondazione Edmund Mach, Italy	(020.5) Turning plant-based side streams into local protein sources using mild processing technologies Helga Eliasdottir, Chalmers University, Sweden	09:30 - 09:50 (S10.4) Using technology to track distribution route and measure the water and carbon impact within the food supply chain Vincent Rosso, Consentio, Spain	(S11.5) The Advisory Group at Food for Life- Spain: How to fund projects Carlos I. Franco, CDTI, Spain	
09:45-10:00	(017.5) Pork liver and lung as potential sources of flavour-related substances Manuel Ignacio López Martínez, IATA-CSIC, Spain	(018.5) Unlocking the potential of chicken rest raw material: optimization of hydrolysis using response surface modeling Josipa Matic, Nofima As, Norway	(019.5) Metabolomics of Amasi; the impact of storage time, lactic acid bacteria, and health benefits Betty Ajibade, <i>Durban University of</i> Technology, South Africa	(020.6) Active, biodegradable films of PHBV with rice straw extracts for food packaging Amparo Chiralt, Universitat Politècnica De Valencia, Spain	9:50 - 10:10 (S10.5) Knowledge, attitude, needs and barriers for the transition of European families towards healthy and sustainable diets. A cross	(S11.6) Managing the Working Groups of Food for Life-Spain: President ot the Food Service WG Purificación García, Universita Politecnica de Valencia, Spain	
10:00-10:15	(017.6) Strategies for the valorization of date fruits from Alicante palm groves Jose Álvarez, Universidad Miguel Hernández, Spain	(018.6) Modulating platelet function with bioactive rich herbs and spices - An acute randomised clinical trial Nadiya Boyko, Uzhhorod National University, Ukraine	(019.6) Biological activity of Spirulina protein isolate based xero-carriers embedding living Lacticaseibacillus rhamnosus GG cells Jennyfer Fortuin, Luxembourg Institute of Science & Technology, Luxembourg	(020.7) Recovery of polyphenols from olive pomace and valorization of exhausted biomass after extraction treatment Giulia D'agostino, University Of Genoa, Italy	cultural study in Spain, Finland, and Poland Ana Baranda, <i>AZTI, Spain</i>	(S11.7) Research and Innovation proposals at Food for Life-Spain Teresa Jiménez, IATA-CSIC, Spain	
10:15-10:30		(018.7) Development of Biobased Phase Change Material Packaging for Fat Bloom Control in Dark Chocolate Qianzhu Zhao, National University of Singapore, Singapore	(019.7) Impact of Plant Species, Soil Types, and Cereal Varieties on Fermented Munkoyo Beverage Mubonda Kalumbilo, Wageningen University & Research, Netherlands		10:10 - 10:30 (S10.6) Envisioning transparency for more sustainable food systems: towards a basis for future policy Ananya Mukherjee, Cardiff University, UK	(11.8) How to deal with new proposals: An SME approach at a Living Lab Miguel Angel Cubero, Ingredalia, Spain	
10:30-11:00			m 1 [P2.1] & Multipurpose room 2 [P2				
Room 11:00-13:00	Auditorium 1 Session 21: Development of sustainable food production systems Chairs: Malgorzata Nowacka & Hugo de Vries	Auditorium 2 Session 22: Application of digital technologies in food chain and food sectors Chairs: Belen Franch & James Lyng	Auditorium 3 Session 23: Food and Microbes Chairs: Pedro Martinez-Culebras & Maria Carmen Collado	SC 1+2 Session 24: Valorization of bioactive compounds from food side streams Chairs: Maria Lavilla & Krystian Marszalek	SC 3+4 Special Session 12: FOODPathS- FOODForce: Shaping our Future Sustainable Food Systems Chairs: Jeroen Knol & Peter Holl	SC 6+7 Special Session 13: ECO READY project: Achieving ecological resilience for the European food system through consumer-driven policies Chair: loannis Manikas	SC 8
11:00-11:15	(KN21.1) Upcycling of Brewer Spent Grain, Extending the Circularity of a Brewery Byproduct to Human Diet Moritz Richard Münkner, Lund University, Sweden	(KN22.1) Influence of Process Conditions on Gas Hydrate Formation for the Cold- Concentration of Soluble Coffee Christoph Hartmann, Nestlé Research, Switzerland	(KN23.1) Bacteria, food, humans-a commitment for life Melanie Huch, Max Rubner- Institute, Germany	(KN24.1) Exploring the Effects of High Pressure Processing on the Quality of Craft Beer Berta Polanco-Estibález, Hiperbaric, Spain	(S12.1) The Partnership Sustainable Food Systems and Food2030 Pathways fuel the food science and technology agenda Hugo de Vries, INRAE, France	(\$13.1) Achieving ecological resilience for the European food system through consumer-driven policies; an introduction to the ECO-READY HE project loannis Manikas, Czech University of Life Sciences in Prague, Czechia	

11:15-11:30					(S12.2) CLEVERFOOD project Camila Massri, European Food Information Council (EUFIC), Belgium	(\$13.2) Climate change and biodiversity drivers of food security: A systematic literature review loannis Manikas, Czech University of Life Sciences in Prague, Czechia	
11:30-11:45	(021.2) Non-invasive detection offoreign bodies in burger meat patties by contactless ultrasound imaging Gentil Andres Collazos Escobar, Universitat Politècnica De València, Spain	(O22.2) Optimization of Cutin Extraction from Tomato Processing Waste by High-Pressure Homogenization Gianpiero Pataro, University of Salerno, Italy	(O23.2) Lactobacillus cultures prevent the proliferation of L. monocytogenes in ready to eat ham products Darryl D'souza, SunPork Group, Australia	(Q24.2) Elderly Digestion of Whey Protein Laura Gunning, University College Dublin, Ireland	(S12.3) FoSSNet project Camila Massri, European Food Information Council (EUFIC), Belgium	(\$13.3) Projecting long-term ecological resilience of European food systems Towards an integrated protocol for bridging scenarios with economic modelling Markus Dettenhofer, Czech	
11:45-12:00	(021.3) Development of 3D printed patties prepared with mycoprotein and insects for sustainable and personalized nutrition Alvar Gracia, Leitat Technological Center, Spain	(022.3) Valorization of Brown Seaweed's Industrial Solid-Residue After Alginate Extraction for the Production of Protein Extracts Hylenne Bojgges Gutierrez, IATA- CSIC, Spain		(024.3) Comparison of High-Pressure Homogenization and Pulsed Electric Fields for the extraction of compounds from yeast Javier Marin, University of Zaragoza, Spain	(S12.4) High quality for more sustainable white fish products Arne Karlsen, <i>Gunnar Klo, Norway</i> Anlaug Å. Hansen, <i>Nofima, Norway</i>	University of Life Sciences in Prague, Czechia	
12:00-12:15	(021.4) Cheese whey valorisation to develop compostable films for lipophilic foodstuffs Alaitz Etxabide Etxeberia, Biomat Research Group, The University Of The Basque Country, Spain	(O22.4) The credibility of dietary advice formulated by ChatGPT Iga Rybicka, Poznan University of Economics & Business, Poland	(023.4) Ranking microbial hazards from ingestion of Ready-To-Eat fresh produce irrigated with treated wastewater Vaibhav Bhatia, University College Dublin, Ireland	(O24.4) Valorization of spent coffee grounds towards the production of polyhydroxyalkanoates Maria Bolla, University Of Genoa, Italy	(S12.5) Value chain synergies in sustainability - A case study of livestock and sustainable leather Maria Manuela Estevez Pintado, Catholic University of Portugal	(S13.4) Do the existing EU policies effectively integrate scientific data to promote a transition towards resilience in Climate Change, Biodiversity, and Food Security? The ECO-READY Project analysis. Luciana Di Gregorio, Annamaria Bevivino, ENEA, Italy	
12:15-12:30	(021.5) Development and characterisation of TPS/PBAT biodegradable food packaging containing food preservative Phanwipa Wongphan, Kosetsart University, Thailand	(022.5) Digestibility of hemp seed oleosomes loaded with cannabidiols Zhaoxiang Ma, Wageningen University & Research, Netherlands	(O23.5) Thermal Inactivation of Ohmic Pilot Plant: Non-pathogenic E. coli Surrogate and Vitamin C Reduction Evaluation Dario Pavon Vargas, CFT S.p.A, Italy	(024.5) Advancing in the knowledge of colorless carotenoids: Preliminary study of bioavailability in humans Paula Mapelli-Brahm, University of Seville, Spain	(\$12.6) Innovative Approaches for Local Food Processing @ FOX Peter Holl, DIL Deutsches Institut für Lebensmitteltechnik e.V., Germany	(\$13.5) EU citizens' response to food security and climate change Konstantinos Mattas, Aristotle University of Thessaloniki, Greece	
12:30-12:45	(021.6) Bioplastic material based on ethylcellulose Eden Shlush, Technion – Israel Institute Of Technology, Israel	(022.6) Process Simulation approach for improving Water-Energy Nexus (WEN) in Tomato Processing Facility Gianpiero Pataro, University of Salerno, Italy	(O23.6) Antimicrobial-resistant lactic acid bacteria in sheep flocks and in their raw milk used for cheese-making Gorka Santamarina-García, University Of The Basque Country, Spain	(024.6) Unlocking Kamut Wheat's Antioxidant Potential: Triple Detector Analysis of Bound and Free Phenolic Extracts Mutasem Razem, Libera Universita di Bolzano, Italy	(\$12.7) 12:20 – 13:00 Panel discussion Shaping our Future Sustainable Food Systems Moderators: Jeroen Knol, EFFOST, Netherlands	(\$13.6) Feasibility of an Al-powered observatory for crop yield prediction using satellite images X. Wang, Wageningen Food Safety Research, Netherlands	
12:45-13:00	(O21.7) Encapsulation of Bioactive Compounds by High Throughput Electrospraying Assisted by Pressurized Gas Cristina Prieto, IATA-CSIC, Spain	(022.7) Effect of ultrasound pre-treatment prior to enzymatic hydrolysis on quality parameters of herring hydrolysate Janna Cropotova, Norwegian University of Science and Technology, Norway	(023.7) Microorganisms in unpasteurized spontaneously fermented vegetables: a food safety perspective Mathis Vermeersch, Ghent University, Belgium	(O24.7) Processing, Digestion and Colonic Fermentation as Determinants of Fruit and Nut Bagasse Functional Effects Noelia Betoret, Universitat Politècnica De València, Spain	Peter Holl, DIL Deutsches Institut für Lebensmitteltechnik e.V., Germany Peter Jongebloed, Wageningen University & Research Center, Netherlands		
13:00-14:30	Lunch Poster Session 2 Exhibition	n area & Multipurpose room 1 [P2.1] &	Multipurpose room 2 [P2.2, P2.3]				
Room 14:30-16:00	Auditorium 1 Plenary Session 3: Tailored design of Chairs: Vincenzo Fogliano & Tara Grau						
14:30-15:00	(PL3.1) Agricultural by-products and food reselena Ibañez, CIAL-CSIC, Spain	sidues to revalorize our world					
15:00-15:30	Giancarlo Cravotto, University of Turi	s for selective green extraction of prin in, Italy	nary and secondary metabolites from p	plant material			
15:30-16:00	(PL3.3) Testing the effectivity and safety of p María Lavilla, AZTI, Spain	hage cocktails for foods and food prod	uction				

16:00-16:30	Refreshment Break Poster Session 2 Exhibition area & Multipurpose room 1 [P2.1] & Multipurpose room 2 [P2.2, P2.3]
Room	Auditorium 1
16:30-17:30	Awards & Conference Closing remarks Chairs: Francisco J. Barba & Maria Carmen Collado
16:30-17:10	Awards Ceremony -Lifetime Achievement Award and Science to Society Award, Dolores O'Riordan, President of EFFoST Board -EFFoST Student of the Year Awards, Dolores O'Riordan, President of EFFoST Board and Ralf Jakobi, Cargill, Belgium -GNT Young Scientist Award, Kai Rieneke, GNT Group, Germany
17:10-17:30	Conference closing remarks & EFFo5T2024 announcement