



2022 Annual Conference & Exhibition Functional Foods, Nutraceuticals, Natural Health Products, and Dietary Supplements

October 2-5, 2022 / İstanbul - Türkiye



BOOK OF ABSTRACT



www.isnff.org



IUFOST



This project has received funding from
the European Union's Horizon 2020
research and innovation programme
under grant agreement no 951994



Journal of
Food Bioactives

An Official Scientific Publication of the
International Society for Nutraceuticals and Functional Foods
(ISNFF)

An Official Journal of the International Union of Food Science
and Technology (IUFoST)





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Editor-in-Chief
Ferdinand Brückner
Co-Editor-in-Chief
Christoph Henkel



Message from the Chairs

The International Society for Nutraceuticals and Functional Foods (ISNFF) is pleased to have its 14th International Conference and Exhibition in İstanbul, Türkiye.

The ISNFF was established in 2008 as a not-for-profit organization in response to widespread recognition of the role on natural health products, including functional foods, nutraceuticals as well as dietary supplements for health promotion and disease risk reduction. Over the past several years, the ISNFF has managed to bridge the existing gap among scientific community, health care professionals, industry and investors, as well as the public and consumers through its conferences, short courses, seminars, newsletters, and other publications. Meanwhile, the companion journal of ISNFF, *Journal of Food Bioactives (JFB)*, published by ISNFF & Associates, is with a calculated impact factor of around 4.81. All presenters are encouraged to submit their manuscripts to the journal. Find out more about the journal and submission process <isnff-jfb.com>.

Moreover, the Society organizes short courses/seminars in hot topic areas either prior to the annual conferences or joint with other societies such as Institute of Food Technologists (IFT), American Chemical Society's (ACS) special meetings and International Union of Food Science and Technology (IUFoST). The ISNFF publishes several newsletters each year for communicating the latest information in the field to its members and the public as well as those interested in the latest developments in this ever-growing area. We have had a challenging couple of years due to the COVID-19 pandemic. The ISNFF 2020 Conference and Exhibition that was postponed to 2021, was held October 17-20, 2021 in Nanjing, China in a hybrid form, attracted some 110 international participants, some 2,000 online and 280-300 participants in person.

The 2022 conference includes participation of delegates from 28 countries with 217 presentations (134 orals and 83 posters). The presentations include those from world-renowned experts in the field, bringing to the audience state-of-the-art information and the latest developments in the field. This year's event includes a "Flash Talk Session" for student competition.

The 2022 conference of the ISNFF is co-organized as an activity of the **Horizon 2020 – PhenolAcTwin Project**, coordinated by TÜBİTAK MAM. In addition, Food Innovation Platform of Türkiye (TÜGİP), established by TÜBİTAK MAM, supports SMEs' participation at the conference. Two TÜGİP sponsored industry sessions are included in the program.

The exhibition at ISNFF complements its scientific meeting programs with products, services, and publications in the field of functional foods, nutraceuticals, and natural health products.

We encourage you all to actively participate at the conference and its different events and to meet old friends and have the opportunity to make new ones. Please also take advantage of visiting important historical and cultural attractions in any spare time you may find. We would like to extend our gratitude to sponsors, exhibitors, session organizers, conference organizers, and moderators.

On behalf of ISNFF, we wish you a very productive and enjoyable meeting.

Best wishes,

Dr. Fereidoon SHAHIDI & Dr. Cesarettin ALASALVAR (Conference Chairs)

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Companion Journal

All presenters are encouraged to submit their papers to the companion journal,
Journal of Food Bioactives (JFB).

Find out more about the journal and submission process < www.isnff-jfb.com >

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 **Journal of
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Editor-in-Chief
Fereidoon Shahidi

Co-Editor-in-Chief (Honorary)
Belwei Zhu

IAFoST/IUFOST Scientific Roundtable Discussion (March 16, 2022)

WHITE PAPER
SARS-CoV-2-induced Host Metabolic Reprogram (HMR)
Global Management of COVID-19 &
Post-Acute Sequelae of COVID-19 (PASC)

ISNFF & ASSOCIATES Publishing Company, Inc.

**ISNFF 2022
PROGRAMME AT A GLANCE**

	2 Oct / Sun	3 Oct / Mon	4 Oct / Tue	5 Oct / Wed						
All day		Registration	Registration	Registration						
08:30 - 09:00		Opening Ceremony								
09:00 - 10:30		Hall A PL1 PL2 PL3	Hall A PL4 PL5 PL6	Hall A PL7 PL8 PL9						
10:30 - 11:00		Nutrition Break / Poster Session	Nutrition Break / Poster Session	Nutrition Break						
		Hall A	Hall B	Hall C	Hall A	Hall B	Hall C			
11:00 - 13:00		S1	S2	S3	S10	S11	S12	S19	S20	S21
13:00 - 14:00		Lunch provided		Lunch provided AGM Meeting		Lunch provided				
14:00 - 16:00		S4	S5	S6	S13	S14	S15	S22	S23	
16:00 - 16:30		Registration	Nutrition Break / Poster Session	Nutrition Break / Poster Session	Closing and Flash Talk Award Ceremony					
16:30 - 18:30			S7	S8	S9	S16	S17	S18	Cultural Tour and Visiting of TÜBİTAK MAM	
19:30 - 23:00	Free Time	Welcoming Reception	Congress Gala Dinner and Awards *							

* ISNFF and Fellow Award Winners will be announced at the Congress Gala Dinner, which will be a ticketed event and be on the Bosphorus (Cruise Dinner).

AGM: Annual General Meeting of ISNFF (restricted to Professional Members of ISNFF).

PL: Plenary (30 min each presentation including questions)

S: Session (20 min each presentation including questions)

Session No	Session Title
Session 1	Functional Proteins and Biopeptides - 1
Session 2	Absorption, Bioavailability, Metabolism, and Health Effects of Bioactives
Session 3	Honey, Royal Jelly, and Bee Products in Health
Session 4	Functional Proteins and Biopeptides - 2
Session 5	Advances in Nano/Micro-Encapsulation for Bioavailability Improvement
Session 6	Nutraceuticals and Functional Food Ingredients from Co-products and Processing By-products
Session 7	The Mediterranean Diet and Health Benefits of Nuts and Dried Fruits
Session 8	Pre- and Probiotics, Gut Microbiom, and Gastrointestinal Health
Session 9	Processing and Bioprocessing of Functional Food Ingredients
Session 10	Bioavailability of Dietary Polyphenols
Session 11	Analysis of Nutraceuticals and Functional Food Ingredients
Session 12	Diabetes and Metabolic Syndrome, Obesity, and Weight Management
Session 13	Global Regulations, Traditional Therapeutic, and Fermented Foods
Session 14	Functional Beverages and Human Health
Session 15	Natural Antioxidants and Prooxidants (Phenolics, Carotenoids/Xanthophylls, etc.)
Session 16	Functional Food Ingredients and Nutraceuticals in Brain Health, Cancer Chemoprevention, and Cardiovascular Disease
Session 17	Marine and Algal Products and By-products
Session 18	Encapsulation of Functional Ingredients and their Bioactivity
Session 19	COVID-19 and Other Viral Diseases: Role of Phytochemicals and Traditional Remedies
Session 20	Exploring Medicinal Plants for Human Uses
Session 21	Bioavailability and Bioaccessibility of Functional Food Ingredients
Session 22	Functional Foods: From Farm and Lab Bench to the Market Place
Session 23	Flash Talks

PLENARY SPEAKERS

Moderators:

Fereidoon Shahidi (Memorial University of Newfoundland, Canada)

Jerzy Zawistowski (University of British Columbia, Canada)

PL1	148	Food bioactives and functional foods: Facts and fallacies Fereidoon Shahidi – Memorial University of Newfoundland (Canada)
PL2	165	Nanoscience of tea Pingfan Rao - CAS.SIBS-Zhejiang Gongshang University (China)
PL3	150	Gut microbiota and metabolism of bioactives Francisco A. Tomás Barberán - CEBAS-CSIC (Spain)

Moderators:

Ronald B. Pegg (University of Georgia, USA)

Kazuo Miyashita (Obihiro University of Agriculture and Veterinary Medicine, Japan)

PL4	166	Spontaneous crude lecithin-based liposomes for encapsulation and delivery of hydrophobic bioactives Alejandro Marangoni - University of Guelph (Canada)
PL5	141	Beneficial health effect of sphingolipids via regulation of gut function Kazuo Miyashita - Obihiro University of Agriculture and Veterinary Medicine (Japan)
PL6	10	Functional foods and health: Essentiality of human evidences Mauro Serafini - Teramo University (Italy)

Moderators:

Cesarettin Alasalvar (TÜBİTAK MAM, Türkiye)

Paul Kroon (Quadram Institute, UK)

PL7	5	Five decades of lipid healthcare: Omega-3LCP story from marine oils to plant science - Natural supplements to medicine Ian Newton - CERES Consulting (Canada)
PL8	158	Metabolism and bioavailability of polyphenols and its importance in developing polyphenol nutraceuticals Paul Kroon - Quadram Institute (UK)
PL9	137	Mechanistic insights into nutrition and vascular-related diseases using multi-omics and integrative approaches: Machine learning as a next challenge in nutrition research Dragan Milenkovic - University of California Davis (USA)

ORAL PRESENTATIONS

Session 1: Functional Proteins and Biopeptides – 1

Moderators:

Rotimi Aluko (University of Manitoba, Canada)

Jianping Wu (University of Alberta, Canada)

O1	Tripeptide IRW protects MC3T3-E1 cells against Ang II stress in a AT2R dependent manner Jianping Wu - University of Alberta (Canada)
O2	Therapeutic potential of novel bio-peptides from non-bovine milk Hisham R. Ibrahim - Kagoshima University (Japan)
O3	Exploitation of olive (<i>Olea europaea L</i>) seed proteins as up-graded source of bioactive peptides with multifunctional properties: focus on antioxidant and dipeptidyl-dipeptidase - IV inhibitory activities, and GLP-1 improved modulation, and glucagon-like peptide 1 improved modulation Carmen Lammi - University of Milan (Italy)
O4	<i>In vitro</i> inhibition of acetylcholinesterase activity by yellow field pea (<i>Pisum sativum</i>) protein-derived peptides as revealed by kinetics and molecular docking Nancy Asen - University of Manitoba (Canada)
O5	Contribution of hydrolysis and drying conditions to whey protein hydrolysate characteristics and <i>in vitro</i> antioxidative properties Richard Fitzgerald - University of Limerick (Ireland)

Session 2: Absorption, Bioavailability, Metabolism, and Health Effects of Bioactives

Moderators:

Rong Tsao (Guelph Research & Development Centre, Canada)

Chin-Kun Wang (Chung Shan Medical University, Taiwan)

O6	The improvement of bioavailability and health benefits by phytochemicals interactions Chin-Kun Wang - Chung Shan Medical University (Taiwan)
O7	Phenolics of green and yellow pea hulls: their composition, metabolism, antioxidant and anti-inflammatory activities and roles in intestinal health Rong Tsao - Guelph Research & Development Centre (Canada)
O8	Exploring the role of sulphur compounds derived from broccoli on prostate cancer metabolism Gemma Beasy - Quadram Institute Bioscience (UK)
O9	A comparative study on the absorption of chain- and cyclic-forms of food-derived prolyl-hydroxyproline after the ingestion of different-molecular-weight gelatin and gelatin hydrolysates Yu Iwasaki - Tokyo Kasei University (Japan)
O10	Absorption of balenine in human plasma after ingestion of opah muscle extracts Yasutaka Shigemura - Tokyo Kasei University (Japan)
O11	Impact of two novel plant bioactives on rescue of impaired gut barrier function using human primary cell intestinal epithelium Doug Bolster - Brightseed (USA)

Session 3: Honey, Royal Jelly, and Bee Products in Health

Moderators:

Erdem Yeşilada (Yeditepe University, Türkiye)

Emel Damarlı (Altıparmak Food Industry and Trade Inc., Türkiye)

O12	A powerful collaboration from naturals: apitherapy + phytotherapy Erdem Yeşilada - Yeditepe University (Türkiye)
O13	An investigation of bioactive and physicochemical properties of Turkish pine honey Emel Damarlı - Altıparmak Food Industry and Trade Inc (Türkiye)
O14	Production of an artificial perga possessing high antioxidant activity <i>via</i> lactic acid fermentation of bee pollen Nazlı Arda - İstanbul University (Türkiye)
O15	Quantitation of the myo-inositol and D-pinitol levels as promising bioactive constituents of pine honey and elucidation of the pathway by analyzing sap of <i>Pinus brutia</i> and the secretion of aphid <i>Marchalina hellenica</i> İsmail Emir Akyıldız - Altıparmak Food Industry and Trade Inc (Türkiye)
O16	Changes in biochemical properties of royal jelly by different storage conditions and different packaging materials İlknur Coşkun - Altıparmak Food Co. Balparmak R&D Center (Türkiye)

Session 4: Functional Proteins and Biopeptides – 2

Moderators:

Jianping Wu (University of Alberta, Canada)

Rotimi Aluko (University of Manitoba, Canada)

O17	Vegetable leaves as veritable sources of multifunctional protein hydrolysates Rotimi Aluko - University of Manitoba (Canada)
O18	Examination of physicochemical and functional properties of proteins isolated from local beans of Türkiye Rukiye Gündoğan - İstanbul Technical University (Türkiye)
O19	A cell-based assessment of the muscle anabolic potential of blue whiting (<i>Micromesistius poutassou</i>) protein hydrolysates Niloofar Shekoohi - University of Limerick (Ireland)
O20	Neutrase-alcalse combined hydrolysis of protein isolates from hazelnut meal: Transforming waste to functional food ingredient F. Duygu Ceylan - İstanbul Technical University (Türkiye)
O21	Antihypertensive effect of hydrolysates and peptides from aquacultured flounder fish for developing a health functional food You-Jin Jeon - Jeju National University (Republic of Korea)
O22	Casein-phenol interaction during <i>in vitro</i> digestion provides better bioactive peptide release and phenol delivery to colon Aytül Hamzahoğlu - Hacettepe University (Türkiye)

Session 5: Advances in Nano/Micro-Encapsulation for Bioavailability Improvement

Moderators:

Nandika Bandara (University of Manitoba, Canada)

Asli Can Karaca (İstanbul Technical University, Türkiye)

O23	Formulation of a layered lipid-protein nanoemulsion system for the delivery of hydrophobic resveratrol Nandika Bandara - University of Manitoba (Canada)
O24	Encapsulation of food bioactives using plant proteins as wall materials Aslı Can Karaca - İstanbul Technical University (Türkiye)
O25	A new and green particle formation approach to increasing bioavailability of curcumin Ozan Çiftçi - University of Nebraska-Lincoln (USA)
O26	Increasing the bioaccessibility of tomato pomace bioactives by using excipient emulsion and potential food applications Esra Çapanoğlu - İstanbul Technical University (Türkiye)
O27	Thymoquinone-loaded core-shell nanoparticles: Bioaccessibility and transport across Caco-2 monolayers Elif Atay - Mersin University (Türkiye)

Session 6: Nutraceuticals and Functional Food Ingredients from Co-products and Processing By-products

Moderators:

Petras Rimantas Venskutonis (Kaunas University of Technology, Lithuania)

Amin Ismail (Universiti Putra Malaysia, Malaysia)

O28	Bioactives from small fruit processing by-products and waste for functional foods and nutraceuticals Petras Rimantas Venskutonis - Kaunas University of Technology (Lithuania)
O29	Microencapsulation of anthocyanins recovered from industrial wastes and usage in processed foods Saliha Esin Çelik - İstanbul University-Cerrahpaşa (Türkiye)
O30	Sequential extractions to maximize the valorisation of brewer's spent grains Martina Minestrini - Luxembourg Institute of Science and Technology (Luxembourg)
O31	Characterization of the nutritional profile of avocado by-product: The potential of avocado seed powder as a culinary additive Nour Awad - Ondokuz Mayıs University (Türkiye)
O32	Effects of <i>Cystoseira barbata</i> extracts as a novel seaweed-based biostimulant agent on various crops Ümit Barış Kutman – Gebze Technical University (Türkiye)

Session 7: The Mediterranean Diet and Health Benefits of Nuts and Dried Fruits

Moderators:

Cesarettin Alasalvar (TÜBİTAK MAM, Türkiye)

Emilio Ros (Biomedical Research Institute August Pi Sunyer (IDIBAPS) and University of Barcelona, Spain)

O33	Health effects of nuts within the Mediterranean diet: Insights from the PREDIMED study Emilio Ros - Biomedical Research Institute August Pi Sunyer (IDIBAPS) and University of Barcelona (Spain)
O34	Health claims, nutrients, bioactives, and health benefits of dried fruits Cesarettin Alasalvar - TÜBİTAK MAM (Türkiye)
O35	Natural and roasted hazelnut (<i>Corylus avellana</i> L.) dietary fibers differentially modulate the colonic microbiota in a sex-dependent way Yunus Emre Tuncil - Necmettin Erbakan University (Türkiye)
O36	Cardiovascular health benefits of hazelnuts consumption Fulya Balaban Yücesan - Karadeniz Technical University (Türkiye)
O37	Health-promoting compounds in Turkish hazelnut varieties Neslihan Göncüoğlu Taş - Hacettepe University (Türkiye)
O38	Cellular antioxidant activity of pecan phenolics after <i>in vitro</i> digestion Ronald B. Pegg - University of Georgia (USA)

Session 8: Pre- and Probiotics, Gut Microbiom, and Gastrointestinal Health

Moderators:

Anders Christensen (Apillet ApS, Denmark)

Beraat Özçelik (İstanbul Technical University, Türkiye)

O39	Roles of mechanosensitive ion channel Piezo1 in the dietary fiber-mediated Reg3 β expression in the intestine of mice Dina Mustika Rini - Hiroshima University (Japan)
O40	Mutation strategies for glucansucrase E81 to produce novel glucans and gluco-oligosaccharides Enes Dertli - Yıldız Technical University (Türkiye)
O41	The development of an enteric capsule made from natural materials for oral delivery of probiotics / nutraceuticals Anders Christensen - Apillet ApS (Denmark)
O42	Novel approaches for probiotic encapsulation and R&D perspectives in designing functional fruit-based products Gülce Ertek - Işık Tarım Ürünleri A.Ş. (Türkiye)
O43	Optimization of galacto-oligosaccharides production method from lactose to maximize the prebiotic efficiency Emine Aytunga Arık Kibar - TÜBİTAK MAM (Türkiye)
O44	Novel edible films with probiotics and prebiotics Kübra Sultan Özdemir - Konya Food and Agriculture University (Türkiye)

Session 9: Processing and Bioprocessing of Functional Food Ingredients

Moderators:

Vural Gökmen (Hacettepe University, Türkiye)

Mecit Halil Öztop (Middle East Technical University, Türkiye)

O45	Reformulating traditional Mediterranean foods using alternative technologies Mecit Halil Öztop – Middle East Technical University (Türkiye)
O46	Formation of bioactive tyrosine derivatives during sprouting and fermentation of different whole grains Ecem Evrim Çelik - Hacettepe University (Türkiye)
O47	Use of lyophilised cornelian cherry (<i>Cornus mas</i> L.) puree in functional food development by 3D food printing Zeynep Tacer Caba - Bahcesehir University (Türkiye)
O48	Bioprocessing of edible jelly mushroom to obtain long-chain glycolipids functional as food-grade antimicrobials Tuğba Kabasakal - Gebze Technical University (Türkiye)
O49	Degradation kinetic modelling of moisture, colour and textural properties in Dabai fruit (<i>Canarium odontophyllum</i> Miq) during blanching treatment Rosnah Shamsudin - Universiti Putra Malaysia (Malaysia)

Session 10: Bioavailability of Dietary Polyphenols

Moderators:

Christine Morand (INRAE, France)

Antonio González-Sarrías (CEBAS-CSIC, Spain)

O50	Clinical evidence of the vascular effects of grapefruit flavanones and underlying molecular mechanisms Christine Morand - INRAE (France)
O51	<i>In vitro</i> anti-angiogenic activity of circulating phenolic-derived metabolites Antonio González-Sarrías - CEBAS-CSIC (Spain)
O52	Interactions of single nucleotide polymorphisms in SULT1A1, SULT1C4, ABCC2, APOA1, LPL, APOE and orange juice intake with flavanone metabolism and cardiometabolic outcomes in humans Dragan Milenkovic - University of California Davis (USA)
O53	Dietary anthocyanins and their metabolites: Molecular mechanisms underlying the health effects Irena Krga - University of Belgrade (Serbia)
O54	The protective potential of astaxanthin in endothelial cells exposed to uremic serum samples of hemodialysis patients Abolfazl Barzegari - Université Sorbonne Paris Nord (France)
-	Introduction of PhenolAcTwin Project - Horizon Europe Ebru Pelvan - TÜBİTAK MAM (Türkiye)

Session 11: Analysis of Nutraceuticals and Functional Food Ingredients

Moderators:

Reşat Apak (İstanbul University-Cerrahpaşa, Türkiye)

Bradley Bolling (University of Wisconsin-Madison, USA)

O55	Oxidants, antioxidants, their analytical chemistry and trends - a perspective with reference to the CUPRAC method Reşat Apak - İstanbul University-Cerrahpaşa (Türkiye)
O56	Nutraceuticals from plant-based yogurts as inhibitors of angiotensin-converting enzyme 2 (ACE2) Bradley Bolling - University of Wisconsin-Madison (USA)
O57	Nutritional components, antioxidative and anti-inflammatory properties of <i>Schizophyllum commune</i> (fries) mushroom Amin Ismail - Universiti Putra Malaysia (Malaysia)
O58	Antidegenerative agent from Indonesian food sources: <i>In vitro</i> and <i>in vivo</i> studies Rumiyati Rumiyati - Universitas Gadjah Mada (Indonesia)
O59	Analysis of endocannabinoids in fermented foods of animal and plant origin Tolgahan Kocadağlı - Hacettepe University (Türkiye)
O60	Comparative study on physicochemical properties of tomato juices with non-irradiated and irradiated supplements: olive powder and sugar-beet leaves protein Sanda Pleslic - University of Zagreb (Croatia)

Session 12: Diabetes and Metabolic Syndrome, Obesity, and Weight Management

Moderators:

Debasis Bagchi (Texas Southern University, USA)

Bernard W. Downs (Victory Nutrition International Inc., USA)

O61	A novel technological breakthrough in body recomposition and weight management: A clinical investigation Debasis Bagchi - Texas Southern University (USA)
O62	Obesity: A genetically induced metabolic survival defense due to unhealthy food habits and sedentary life style: Aerobic vs anaerobic metabolic events Manashi Bagchi - Dr. Herbs LLC (USA)
O63	A patented blend of <i>Sphaeranthus indicus</i> and <i>Garcinia mangostana</i> extracts for weight management and improving cardiac health. Trimurthulu Golakoti - Laila Nutraceuticals (India)
O64	Hypoglycemic effect of bread from purple sweet potato flour, starch, and fiber-rich flour in streptozotocin induced diabetic rats Elisa Julianti - Universitas Sumatera Utara (Indonesia)
O65	Pulse bread as a functional food to reduce blood glucose Dan Ramdath - Guelph Research and Development Centre (Canada)
O66	The inhibition of insulin/IGF-1 signaling pathway plays a crucial role in the myo-inositol-alleviated aging in <i>Caenorhabditis elegans</i> Nae-Cherng Yang - Chung Shan Medical University (Taiwan)

Session 13: Global Regulations, Traditional Therapeutic, and Fermented Foods

Moderators:

Apostolos (Paul) Kiritsakis (International Hellenic University, Greece)

Jerzy Zawistowski (University of British Columbia, Canada)

O67	Global regulations of functional foods/nutraceuticals and health claims Jerzy Zawistowski - University of British Columbia (Canada)
O68	Olive oil as an important functional food: The role of its polyphenols Apostolos (Paul) Kiritsakis - International Hellenic University (Greece)
O69	Current status and future developments in lipid-based therapeutics Jaroslav Kralovec - Apollo Health Sciences (Canada)
O70	Effects of environmental stresses on neuroactive compounds produced by <i>Saccharomyces cerevisiae</i> in fermented foods Cemile Yılmaz - Hacettepe University (Türkiye)
O71	The production of fermented dairy product supplemented with <i>Spirulina platensis</i> Levent Yurdaer Aydemir - Adana Alparslan Türkeş Science and Technology University (Türkiye)

Session 14: Functional Beverages and Human Health – TÜGİP Sponsored Industry Session Organized in Cooperation with Turkish Fruit Juice Industry Association (MEYED)

Moderators:

Mehmet Pala (Haliç University, Türkiye)

Melis Yasa (AROMSA, Türkiye)

O72	Mineral water: Macro minerals in mineral water and functional benefits of magnesium-rich mineral waters Tuğba Şimşek - Kızılay Beverage (Türkiye)
O73	The elephant in the room: The central role of fiber in our health and longevity Khosro Ezaz Nikpay - International Fruit and Vegetable Juice Association (UK)
O74	Functional and health transformation in juice drinks Melis Yasa - AROMSA (Türkiye)
O75	Whey based functional beverage with psychobiotic potential Zeynep Ağırbaşı - İzmir Institute of Technology (Türkiye)
O76	Determination of vitexin content in hawthorn (<i>Cretaceous orientalis</i>) and development of vitexin enriched capsul and powder products Hilal Akın - TUNAY Food (Türkiye)
O77	Innovation and consumer trend in functional drinks Ceren Kutlu Hasgüçmen - FERSAN Fermentation Products (Türkiye)

Session 15: Natural Antioxidants and Prooxidants (Phenolics, Carotenoids/Xanthophylls, etc.)

Moderators:

Ryszard Amarowicz (Institute of Animal Reproduction and Food Research, Poland)

Hamit Köksel (İstinye University, Türkiye)

O78	Cereals and legumes as a source of phenolic and polyphenolic compounds Ryszard Amarowicz - Institute of Animal Reproduction and Food Research (Poland)
O79	Antioxidant capacity and profiles of phenolic acid in various genotypes of purple wheat Hamit Köksel - İstinye University (Türkiye)
O80	Relationship between color and antioxidant capacity of fruits and vegetables Burçe Ataç Mogol - Hacettepe University (Türkiye)
O81	The effects of basic ingredients on moisture and carotenoid contents, physical properties, emulsion stability, and organoleptic preference of red fruit (<i>Pandanus conoideus</i>) oil mayonnaise rich in natural antioxidants Zita Letviany Sarungallo - Papua University (Indonesia)
O82	Effect of food combinations and their co-digestion on total antioxidant capacity Ezgi Doğan Cömert - Hacettepe University (Türkiye)
O83	Antioxidant and antimicrobial activities of kebar grass leaf extract Meike Lisangan - Papua University (Indonesia)

Session 16: Functional Food Ingredients and Nutraceuticals in Brain Health, Cancer Chemoprevention, and Cardiovascular Disease

Moderators:

Kenji Sato (Kyoto University, Japan)

Seung Ho Shin (Gyeongsang National University, Republic of Korea)

O84	Efficacy and safety of a novel dietary pyrroloquinoline quinone disodium salt on brain functions in healthy volunteers: A randomized, double-blind, placebo-controlled study Yoshiaki Shiojima - Ryusendo Co., Ltd., Research & Development (Japan)
O85	Discovery of a phytochemical that targets RUVBL1/2 for synthetic lethality Seung Ho Shin - Gyeongsang National University (Republic of Korea)
O86	Functional food ingredients for brain health and cancer chemoprevention Gulacti Topcu - Bezmialem Vakıf University (Türkiye)
O87	Alleviation of high-fat diet-induced mouse liver damage by chlorella extract and its phenethylamine <i>via</i> regulating generation of methylglyoxal Kenji Sato - Kyoto University (Japan)
O88	Pain and inflammation in human subjects: A clinical investigation of HerboJoint Binoy Bordoloi - Bordoloi Biotech LLC (India)
O89	A proprietary combination of <i>Punica granatum</i> fruit rind and <i>Theobroma cocoa</i> seed extracts boosts serum Testosterone levels in men Kiran Bhupathiraju - Laila Nutraceuticals (India)
O90	Efficacy of a novel <i>Trigonella foenum-graecum</i> seed extract in premenopausal women with polycystic ovary syndrome (PCOS): A double-blind, placebo-controlled clinical investigation. Pawan Kumar - Chemical Resources (CHERESO) (India)

Session 17: Marine and Algal Products and By-products

Moderators:

Berat Haznedaroğlu (Boğaziçi University, Türkiye)

Jimin Hyun (Jeju National University, Republic of Korea)

O91	An integrated algal biorefinery concept for carbon-negative functional food components Berat Haznedaroğlu - Boğaziçi University (Türkiye)
O92	Reversibility of sarcopenia by <i>Ishige okamurae</i> and its active derivative diphloroethoxyhydroxycarmalol: aging rodent and human clinical study Jimin Hyun - Jeju National University (Republic of Korea)
O93	Optimising cultivation of the Giant Kelp for bioproduct production Diane Purcell - Teagasc Agriculture and Food Development Authority (Ireland)
O94	Composition, properties, and bioactive absorption of functional foods prepared from undervalued marine resources: Case-studies with algae Carlos Cardoso - Instituto Português do Mar e da Atmosfera (Portugal)
O95	Effects of baking duration on vitamin B complex of <i>Chlorella vulgaris</i> microalgae Engin Bayram - Boğaziçi University (Türkiye)
O96	Monitoring the freshness of fish samples by enzymatic hypoxanthine measurement using the CUPRAC colorimetric sensor Sema Demirci Çekiç - İstanbul University-Cerrahpaşa (Türkiye)
O97	Waste bread in the production of single cell protein from microalga Furkan Türker Sarıcaoğlu - Bursa Technical University (Türkiye)

Session 18: Encapsulation of Functional Ingredients and their Bioactivity

Moderators:

Fatma Yeşim Ekinci (Yeditepe University, Türkiye)

Nurhan Turgut Dunford (Oklahoma State University, USA)

O98	Effect of encapsulation techniques on physical properties and shelf stability of fish oil-whey protein microcapsules Nurhan Turgut Dunford – Oklahoma State University (USA)
O99	Enhancement the tumoricidal activity of bamlet complexes by enzymatic treatment and encapsulation by double emulsion (WOW) method Reyhan Koyuncu - İstanbul Technical University (Türkiye)
O100	Development of liposomes with interdigitated bilayers from a combination of symmetrical phosphatidylcholines and assessment of their stability during storage Nabil Adrar - İstanbul Technical University (Türkiye)
O101	Microencapsulated functional hydrophilic extract from black rosehip: characterization, antioxidant properties, and <i>in vitro</i> gastrointestinal digestion Kadriye Kasapoğlu - İstanbul Technical University (Türkiye)
O102	Encapsulation of omega-3 fatty acids into starch nanoparticle stabilized pickering emulsions Kevser Kahraman - Abdullah Gul University (Türkiye)

Session 19: COVID-19 and Other Viral Diseases: Role of Phytochemicals and Traditional Remedies

Moderators:

Hanny Wijaya (IPB University, Indonesia)

Ebru Pelvan (TÜBİTAK MAM, Türkiye)

O103	Polyphenolic compounds isolated from marine algae: attenuate the replication of SARS-CoV-2 in the host cell through multi target approach of 3CLpro and PLpro Dineth Pramuditha Nagahawatta - Jeju National University (Republic of Korea)
O104	Empowering the transformation of renewable forest product cajuput essential oil as functional flavor for recovery from COVID-19 pandemic Christofora Hanny Wijaya - IPB University (Indonesia)
O105	Development of chewable tablet formulation with propolis and plant based extracts against SARS-CoV-2 infection Öznur Karaoğlu - TÜBİTAK MAM (Türkiye)
O106	Prebiotic and probiotic knowledge and consumption during COVID-19 Merve Seylan - İstanbul Nişantaşı University (Türkiye)
O107	Development of throat spray against SARS-CoV-2 infection Ebru Pelvan - TÜBİTAK MAM (Türkiye)

Session 20: Exploring Medicinal Plants for Human Uses - TÜGİP Sponsored Industry Session

Moderators:

İffet İrem Çankaya (Hacettepe University, Türkiye)

Erdem Yeşilada (Yeditepe University, Türkiye)

O108	Plants used as dietary supplements and their regulations applied in Türkiye İffet İrem Çankaya - Hacettepe University (Türkiye)
O109	Importance of the quality and standardization in natural products Yiğit Ege Çömlekçi - Bionorm (Türkiye)
O110	Innovation capability in medicinal and aromatic plants: Competitive advantages in Türkiye and the Pilot Business Model of LUK Botanic Lütfü Küçük - LUK Botanic (Türkiye)
O111	Production process and product quality in food supplements in Türkiye Aytekin Pasha - TAB Nutraceuticals (Türkiye)
O112	The importance of medicinal and aromatic plants in human health and Talya's role in the sector Elife Özkan - Talya Herbal (Türkiye)
O113	Holistic approach in health and quality standards of natural supplements Deniz Dedeoğlu - Zade Vital (Türkiye)

Session 21: Bioavailability and Bioaccessibility of Food Ingredients

Moderators:

Koen Venema (Maastricht University, The Netherlands)

Esra Çapanoğlu Güven (İstanbul Technical University, Türkiye)

O114	How inter-individual microbiota composition complicates outcomes of functional food trials or does it? Koen Venema - Maastricht University (The Netherlands)
O115	Investigation of the metabolism of black chokeberry (<i>Aronia melanocarpa</i>) polyphenols by the human gut microbiota in a computer controlled dynamic colonic fermentation model (TIM-2) Gizem Çatalkaya - İstanbul Technical University (Türkiye)
O116	Evaluation of <i>in vitro</i> bioaccessibility and ACE inhibition properties of faba bean proteins obtained by ultrasound assisted alkaline extraction Zehra Mertdinç - İstanbul Technical University (Türkiye)
O117	Production of metabolite content using bioreactors in opium poppy Deniz Köm - TÜBİTAK MAM (Türkiye)
O118	Germination of selected radish (<i>Raphanus sativus L.</i>) seeds and investigation of changes in total phenolic content and antioxidant activity of the radish sprouts during <i>in vitro</i> gastro-intestinal digestion Aysun Yücestepe - Aksaray University (Türkiye)

Session 22: Functional Foods: From Farm and Lab Bench to the Marketplace

Moderators:

Ahmet Ceyhan Goren (Gebze Technical University, Türkiye)

Hicret Aslı Yalçın (TÜBİTAK MAM, Türkiye)

O119	The role of behavioral economy in the future of functional food market Ebru Akdağ - MUMSAD (Türkiye)
O120	Certification of neurotoxic amino acids, β -cyanoalanine and γ -glutamyl- β -cyanoalanine, in red lentil Ahmet Ceyhan Goren - Gebze Technical University (Türkiye)
O121	Does drought stress only affect kale (<i>B. oleracea</i>) negatively? Or should there be another reason for calling it “Superfood”? Hicret Aslı Yalçın - TÜBİTAK MAM (Türkiye)
O122	Current perspectives on sugar reduction in fruit products Sinem Arğün - Yeditepe University (Türkiye)
O123	The potential risk in fruit products Işıl Gürsul Aktağ – Hacettepe University (Türkiye)
O124	Using molecular gastronomy for diet of older adults to meet their special nutrient needs: hydrocolloids and phenolic compounds Özge Seçmeler - Altınbaş University (Türkiye)
O125	Changes in biochemical and angiotensin-I-converting enzyme (ACE) inhibitory properties of Spirulina products fermented by <i>Lactobacillus helveticus</i> , <i>Kluyveromyces marxianus</i> , and their mixed culture Müge İşleten Hoşoğlu - Gebze Technical University (Türkiye)

Session 23: Flash Talks

Moderators:

Fereidoon Shahidi (Memorial University of Newfoundland, Canada)

Ronald B. Pegg (University of Georgia, USA)

Notes: Selected students from oral and poster sessions will advance to the flash talk session upon invitation. Therefore, all student presenters are expected to be prepared for giving a 5 min (3 min talk with 3 slides + 2 min questions) talk. There will be a maximum of 20 awards to be presented for the first (one awardee), second (two awardees), and the rest as third place (17 awardees); the latter one depends on meeting the required quality. Awards consist of a certificate and cash. All invited finalists must be a member of ISNFF, so applications fees for 2022 will be deducted from the cash payment to ensure membership compliance (please have your membership application completed if you are invited and are not an ISNFF member already).

POSTER PROGRAM

POSTER PRESENTATIONS

Chair: Cesarettin Alasalvar

- P1 Evaluation of rowan fruit pomace ingredients in meatballs by conventional quality characterization and UHPLC-QTOF-MS based untargeted metabolomics with multivariate data analysis
Viive Sarv - Estonian University of Life Science (Estonia)
- P2 Functional gluten-free macaroni: Enhancement of bioactive compounds and quality using hydrocolloids and low amylose red rice
Anuchita Moongngarm - Mahasarakham University (Thailand)
- P3 Valorization of canola meal using an air-frying pre-treatment to improve phenolic extraction and antioxidant activity
Olamide Fadairo - University of Manitoba (Canada)
- P4 *Sargassum horneri* as a prebiotic dietary supplement for immunity development in *Streptococcus parauberis* infected zebrafish model
Nisansala Madushani Liyanage - Jeju National University (Republic of Korea)
- P5 Enzymatic hydrolysis of head byproducts from olive flounder surimi industry: pepsin hydrolysate attenuates LPS-induced inflammation and oxidative stress in RAW 264.7 macrophages via blocking cell signaling pathways
Henarath Hetti Arachchilage Chathuri Kanchana Jayawardhana - Jeju National University (Republic of Korea)
- P6 Sargachromenol isolated from *Sargassum horneri* inhibits particulate matter-induced inflammation in macrophages through toll-like receptor-mediated cell signaling pathways
Dineth Pramuditha Nagahawatta - Jeju National University (Republic of Korea)
- P7 Anti-hypertensive effect of peptide from olive flounder (*Paralichthys olivaceus*) in EA. Hy926 cells and in spontaneously hypertensive rats
Sang-Woon Lee - Jeju National University (Republic of Korea)
- P8 Diphlorethohydroxycarmalol, a phlorotannin isolated from *ishige okamurae*, induces Ca²⁺-dependent glucose uptake in C2C12 cells and zebrafish model
Hye-Won Yang - Jeju National University (Republic of Korea)
- P9 Detection of cyclic imine (CI) toxins in whole body of shellfishes from domestic market in South Korea in 2021
Young-Sang Kim - Jeju National University (Republic of Korea)
- P10 Structural characteristics of sulfated polysaccharide from *Sargassum horneri* and immune-enhancing activity of polysaccharides combined with lactic acid bacteria
Young-Sang Kim - Jeju National University (Republic of Korea)
- P11 Zebrafish model for studying dexamethasone-induced muscle atrophy and preventive effect of maca (*Lepidium meyenii*)
Bomi Ryu - Jeju National University (Republic of Korea)
- P12 Diphlorethohydroxycarmalol derived from *ishige okamurae* improves behavioral and physiological responses of muscle atrophy induced by dexamethasone in an *in-vivo* model
Bomi Ryu - Jeju National University (Republic of Korea)
- P13 Preparation of water-soluble nanoemulsion of rosemary extract
Bülent Karadeniz – TÜBİTAK MAM (Türkiye)
- P14 Polyphenol-rich pomegranate extract suppresses the microbial metabolism of the proatherogenic trimethylamine N-oxide precursor L-carnitine in an *in vitro* colon model
Julia Haarhuis - Quadram Institute Bioscience (UK)

- P15 Determination of lipid oxidation oil-in-water emulsion containing vitamin D
Sibel Uluata - Inonu University (Türkiye)
- P16 Investigation of physicochemical properties of Malatya apricot gum
Sibel Uluata - Inonu University (Türkiye)
- P17 Design of enriched plum puree pieces
Bertuğ Altuğ Arısüt - Mateks Tarım Ürünleri Gıda Enerji San.ve Tic.A.Ş. (Türkiye)
- P18 The effect of temperature and roasting time on caffeine content, antioxidant activity, organoleptic properties and quality of Robusta (*Coffea canephora*) ground coffee
Zita Letviany Sarungallo - Papua University (Indonesia)
- P19 Food antioxidant or prodrug? The biased inhibitory efficacy of resveratrol monoesters/diesters/triesters in β -carotene bleaching, LDL (low-density lipoprotein) oxidation and DNA scission assays
Han Peng - Memorial University of Newfoundland (Canada)
- P20 Phenolic profile of young plants of garlic
Jerzy Zawistowski - University of British Columbia (Canada)
- P21 Immune-modulation effect of *Sargassum horneri* polysaccharides on concanavalin A-stimulated splenocytes and allergic asthma mouse model
Hyo Jin Kim - Jeju National University (Republic of Korea)
- P22 *Sargassum horneri* ethanol extract containing phenolic acids attenuates PM-induced oxidative stress via ROS scavenging and transition metal chelation
Hyo Jin Kim - Jeju National University (Republic of Korea)
- P23 Interleukin-17A deficiency alleviates airway inflammation in alleviates allergic asthma mice
Jiwon Yang - Jeju National University (Republic of Korea)
- P24 *Sargassum horneri* extract containing sargachromenol attenuates the particulate matter exacerbated allergic asthma through reduction of Th2 and Th17 response in mice
Youngheun Jee - Jeju National University (Republic of Korea)
- P25 *Laminaria japonica* polysaccharides impact the productivities and systemic health by modulating the intestinal microbiome and metabolome of ducks
Jiamei Cui - Jeju National University (Republic of Korea)
- P26 *Undaria pinnatifida* sporophyll and *Gracilaria verrucosa* ameliorate diet-induced obesity and inflammation via a physiological alteration of white adipose tissue in C57BL/6 mice
Eunyoung Kim - Jeju National University (Republic of Korea)
- P27 Biochemical and haematological indices of weaning wistar albino rats fed sprouted sorghum (*Sorghum bicolor*) and bambara nuts (*Vigna. subterranean*) flour formulated diets
Funmilola Adefolalu - Federal University of Technology (Nigeria)
- P28 Nutrient, secondary metabolite and physicochemical constituents of selected plant peels
Famous Ossamulu - Federal University of Technology (Nigeria)
- P29 Development of moringa and baobab supplemented healthy snack bars as functional food by using quality function deployment method
Fatma Yesim Ekinci - Yeditepe University (Türkiye)
- P30 European cranberrybush (*Viburnum opulus L.*) fruit extracts as functional ingredient, which selectively inhibits the growth of foodborne pathogens but not probiotic lactic acid bacteria
Gizem Özan - Yeditepe University (Türkiye)
- P31 Antioxidant properties and prediction bioactive peptides produced from camelina meal (*Camelina sativa (L.) Crantz*)
Thi Ty Na Ngo - Memorial University of Newfoundland (Canada)
- P32 *Octominin abates* LPS-induced chemokines and pro-inflammatory cytokines through blocking tlr/NF- κ B signal transduction from RAW 264.7 macrophages
Mihidukulasuriya Kurera - Jeju National University (Republic of Korea)

- P33 Antioxidant activity and color of fresh juices as affected by dielectric barrier discharge cold plasma treatment
Ecre Sahinoglu - İstanbul Technical University (Türkiye)
- P34 The relationship of the inflammatory potential of diet with eating attitudes and appetite
Hatice Çolak - Üsküdar University (Türkiye)
- P35 Effects of dielectric barrier discharge cold plasma treatment on the total phenolic content and antioxidant activity of avocado seed flour
Aleyna Rabia Karakaş - İstanbul Technical University (Türkiye)
- P36 Determination of nitric oxide radical scavenging activity of ascorbic acid with the aid of modified gold nanoparticles and applications
Ziya Can - İstanbul University-Cerrahpaşa (Türkiye)
- P37 Olive (*Olea europaea L.*) leaf extracts obtained from different regions of Türkiye inhibit the proliferation and migration/invasion of various cancer lines *via* inducing apoptosis
Birsen Cevher-Keskin – TÜBİTAK MAM (Türkiye)
- P38 Investigation antiviral activity of mediterranean herbs and spices against SARS-CoV-2 using *in silico* methods
Yuksel Cetin - TÜBİTAK MAM (Türkiye)
- P39 Screening antiviral and immunomodulatory Mediterranean herbs and spices against SARS-CoV for ACE-2, MPRO, and PAD 4 using *in silico* pyr
Yuksel Cetin - TÜBİTAK MAM (Türkiye)
- P40 Effects of cold plasma application on antioxidant properties of dandelion root
Berfin Eda Elçik - İstanbul Technical University (Türkiye)
- P41 Enrichment of ice cream with roselle (*Hibiscus sabdariffa*) powder: Effects on antioxidant capacity and technological properties
Hamza Alasalvar - Nigde Omer Halisdemir University (Türkiye)
- P42 Identification of *Lactobacillus plantarum* genes increasing the survival through the upper gastrointestinal tract
Tarık Öztürk - TÜBİTAK MAM (Türkiye)
- P43 Protective effect of phytosomes on the hemolytic activity of plant derived Aristoside-C and Davisianoside-B saponins
Şebnem Erçelen Ceylan - TÜBİTAK MAM (Türkiye)
- P44 Anti-inflammatory activity of fucoidan extracted from brown alga *Ecklonia maxima* leaves in particulate matter-stimulated RAW 264.7 macrophage cells
Rajasinghe Peli Gedara Sewwandi Kaushalya Amarasiri - Jeju National University (Republic of Korea)
- P45 Development of a 3D Printer and its application on fungi based diet for elderly/dysphagia patients
Evren Demircan - İstanbul Technical University (Türkiye)
- P46 Mineral profile of enriched modern bread with an ancient Anatolian wheat from Türkiye
Evren Demircan - İstanbul Technical University (Türkiye)
- P47 Encapsulation of bioactive algal pigments: Optimization for functional food applications
Tamer Bayhan - Boğaziçi University (Türkiye)
- P48 Determination of antiviral properties of PHYTORELIEF® herbal food supplement against Wuhan (B.1.36) variant of SARS-CoV-2 virus
Gamze Çakırca - TÜBİTAK MAM (Türkiye)
- P49 Immunomodulatory effects of selected medicinal herbs and their essential oils: A comprehensive review
Emel Önder Firat - TÜBİTAK MAM (Türkiye)
- P50 Knowledge in red palm oil as functional food towards purchase intention and future purchasing patterns among Malaysian
Areej Mohd Taufik - Malaysian Palm Oil Council (Malaysia)

- P51 Anti-microbiological activity of the pomegranate peel
Busra Örnek - CCC R&D CENTER (Türkiye)
- P52 Nutritional importance of blueberry
Merve Çinarsar - CCC R&D CENTER (Türkiye)
- P53 Determination of marker phenolic compounds for honeys with different botanical origins
Ufuk Alpat - Balparmak R&D Center (Türkiye)
- P54 Encapsulation and storage stability of rosemary extract
Sena Saklar Ayyildiz - TÜBİTAK MAM (Türkiye)
- P55 Antinutritional compounds in faba bean (*Vicia faba*) proteins as affected by different extraction methods
Chamila Nimalaratne - The University of Manitoba (Canada)
- P56 Effect of citric acid fortification on the properties of tiger nut flour
Tawakaltu Abdulrasheed-Adeleke - Federal University of Technology (Nigeria)
- P57 Biochemical and hematological indices of weanling wistar albino rats fed sprouted sorghum (*Sorghum bicolor*) and *Vigna subterranean* flour formulated diets
Olufunmilayo Akanya - Federal University of Technology (Nigeria)
- P58 *In vivo* toxicological evaluation of edible chitosan- starch film for food packaging
Helmina Akanya - Federal University of Technology (Nigeria)
- P59 Detrimental impact of the fine dust in an aquatic organism Zebrafish: a protective agent on ocular damage *in vitro* and *in vivo* model
Jimin Hyun - Jeju National University (Republic of Korea)
- P60 Phytochemical composition, antioxidant and enzyme inhibitory activities of *Dioscorea caucasica* and *D. nipponica* leaf and tuber extracts
Petras Rimantas Venskutonis - Kaunas University of Technology (Lithuania)
- P61 Anti-hypertensive effect of peptide from olive flounder (*Paralichthys olivaceus*) in EA. Hy926 cells and in spontaneously hypertensive rats
Sang-Woon Lee - Jeju National University (Republic of Korea)
- P62 Bioactivity screening for antioxidant and anti-inflammatory activities of marine microorganisms (bacteria, fungus, microalgae) collected in South Korea
Sang-Woon Lee - Jeju National University (Republic of Korea)
- P63 Immuno-enhancing effect of fucoidan from brown seaweed *Sargassum thunbergii* *in vitro* and *in vivo*
Fengqi Yang - Jeju National University (Republic of Korea)
- P64 Sargachromenol isolated from *Sargassum horneri* inhibits particulate matter-induced inflammation in macrophages through toll-like receptor-mediated cell signaling pathways
Dineth Pramuditha Nagahawatta - Jeju National University (Republic of Korea)
- P65 *Sargassum horneri* as a prebiotic dietary supplement for immunity development in *Streptococcus parauberis* infected zebrafish Model
Nisansala Madushani Liyanage - Jeju National University (Republic of Korea)
- P66 Enzymatic hydrolysis of head byproducts from olive flounder surimi industry: pepsin hydrolysate attenuates LPS-induced inflammation and oxidative stress in RAW 264.7 macrophages *via* blocking cell signaling pathways
Henarath Hetti Arachchilage Chathuri Kanchana Jayawardhana - Jeju National University (Republic of Korea)
- P67 Bioavailability of short-chain peptides and amino acid derivatives in miso in rat
Atsuya Nagao - Kyoto University (Japan)
- P68 Metabolic fate of pyroglutamyl peptides in a rice protein hydrolysate in intestine and blood after oral administration
Satoshi Miyauchi - Kyoto University (Japan)

- P69 Bioavailability of Pro-Hyp upon ingestion of collagen hydrolysate (CH) with the presence of rice protein hydrolysate (RPH)
Sri Wijanarti - Kyoto University (Japan)
- P70 Peptides in micro and macro algae and their digests by stomach and intestinal proteases
Rina Shinomiya - Kyoto University (Japan)
- P71 Validation and development for uncomplicated quantification by using a reversed-phase HPLC-UV method of fucosterol derived from *Sargassum spp.*
Jun-Ho Heo - Jeju National University (Republic of Korea)
- P72 The effect of sulfated polysaccharides derived from *Sargassum thunbergii* on intestinal mucosal immunity in zebrafish model
Jun-Ho Heo - Jeju National University (Republic of Korea)
- P73 Diphlorethohydroxycarmalol, a phlorotannin isolated from *ishige okamurae*, induces Ca²⁺-dependent glucose uptake in C2C12 cells and zebrafish model
Hye-Won Yang - Jeju National University (Republic of Korea)
- P74 Antioxidant benefits of euryhaline microalgal species: An *in vitro* exploration
Manpreet Kaur - Punjab Agricultural University (India)
- P75 Bioaccessibility and transepithelial transportation of quercetin and rutin: Effects of supercritical anti-solvent micronization process and food models
Gülay Özkan - İstanbul Technical University (Türkiye)
- P76 Investigating the antioxidant potential of *Crataegus monogyna Jackq.* and *Crataegus orientalis Pall.* phenolics during gastrointestinal digestion
Dilara Tas - İstanbul Technical University (Türkiye)
- P77 Spent coffee phenolics improve the functionality of chickpea proteins
Beyza Vahapoglu - İstanbul Technical University (Türkiye)
- P78 The effect of personality on chrononutrition during the COVID-19 lockdown in Qatar
Tamara Al-Abdi - Qatar University, Doha, Qatar
- P79 Effects of *Cystoseira barbata* extracts as novel seaweed-based biostimulants on various crops
Ümit Bariş Kutman - Gebze Technical University (Türkiye)
- P80 Extracts obtained from *Cistus creticus*, cultivated at varied levels of salinity, exhibit promising therapeutic potential for pancreatic cancer cell lines
Yağmur Arikan - Gebze Technical University (Türkiye)
- P81 Biofortification of soilless lettuce with selenium and zinc
Ayşenur Bayrak - Gebze Technical University (Türkiye)
- P82 Enhancing the health benefits of strawberry as a functional food by biofortification with selenium and iodine
Ayşenur Çataler Karakuş - Gebze Technical University (Türkiye)
- P83 Functionalizing commercial soilless tomatoes *via* Se biofortification
Ömer Faruk Taştan - Gebze Technical University (Türkiye)