# 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		Openi	ing Cere	emony						
			Hall A			Hall A			Hall A	
09:00 - 10:30			PL1			PL4			PL7	
07.00 10.50			PL2			PL5			PL8	
			PL3			PL6			PL9	
10:30 - 11:00			rition Br ster Sess			ition Br ster Sess		Nut	rition B	reak
		Hall	Hall	Hall	Hall	Hall	Hall	Hall	Hall	Hall
		A	В	С	A	В	С	A	В	С
11:00 - 13:00		S1	S2	S3	S10	S11	S12	S19	S20	S21
13:00 - 14:00	13:00 - 14:00		Lunch provided		Lunch provided AGM Meeting		Lunch provided			
14:00 - 16:00		S4	S5	<b>S</b> 6	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	<b>S</b> 9	S16	S17	S18	Cu	ltural To	our
19:30 - 23:00	Free Time	Welcoming Reception		Congress Gala Dinner and Awards *		and Visiting of TÜBİTAK MAM				

<sup>\*</sup> ISNFF and Fellow Award Winners will be announced at the Congress Gala Dinner, which will be a ticketed event and be on the Bosporus (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
0 1	
Session 1	Functional Proteins and Biopeptides - 1
<b>Session 2</b>	Absorption, Bioavailability, Metabolism, and Health Effects of Bioactives
Session 3	Honey, Royal Jelly, and Bee Products in Health
<b>Session 4</b>	Functional Proteins and Biopeptides - 2
<b>Session 5</b>	Advances in Nano/Micro-Encapsulation for Bioavailability Improvement
Session 6	Nutraceuticals and Functional Food Ingredients from Co-products and Processing By-products
<b>Session 7</b>	The Mediterranean Diet and Health Benefits of Nuts and Dried Fruits
<b>Session 8</b>	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)

Francisco A. Tomás Barberán (CEBAS-CSIC, Spain)

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

#### **Moderators:**

Ronald B. Pegg (University of Georgia, USA)

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

DI 4	1//				
PL4	166	Spontaneous crude lecithin-based liposomes for encapsulation and delivery of hydrop-			
		hobic 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: Omaga-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 <b>Dragan Milenkovic -</b> 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)

01	Triportide IDW protects MC2T2 E1 cells against Ang II stress in a AT2D dependent			
01	Tripeptide IRW protects MC3T3-E1 cells against Ang II stress in a AT2R dependent			
	manner			
	Jianping Wu - University of Alberta (Canada)			
<b>O2</b>	Therapeutic potential of novel bio-peptides from non-bovine milk			
	Hisham R. Ibrahim - Kagoshima University (Japan)			
03	Exploitation of olive (Olea europaea L) seed proteins as up-graded source of bioactive			
	peptides with multifunctional properties: focus on antioxidant and dipeptidyl-dipeptida-			
	se - IV inhibitory activities, and GLP-1 improved modulation, and glucagon-like peptide			
	1 improved modulation			
	Carmen Lammi - University of Milan (Italy)			
04	In vitro inhibition of acetylcholinesterase activity by yellow field pea (Pisum sativum)			
	protein-derived peptides as revealed by kinetics and molecular docking			
	Nancy Asen - University of Manitoba (Canada)			
<b>O5</b>	Contribution of hydrolysis and drying conditions to whey protein hydrolysate characte-			
	ristics and in vitro 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)

<b>O</b> 6	The improvement of bioavailability and health benefits by phytochemicals interactions				
	Chin-Kun Wang - Chung Shan Medical University (Taiwan)				
<b>O</b> 7	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)				
<b>O8</b>	Exploring the role of sulphur compounds derived from broccoli on prostate cancer me-				
	tabolism				
	Gemma Beasy - Quadram Institute Bioscience (UK)				
09	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 ge-				
	latin 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)				
011	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)				
<b>O13</b>	An investigation of bioactive and physicochemical properties of Turkish pine honey				
	Emel Damarlı - Altıparmak Food Industry and Trade Inc (Türkiye)				
<b>O14</b>	Production of an artificial perga possessing high antioxidant activity via lactic acid fer-				
	mentation of bee pollen				
	Nazlı Arda - İstanbul University (Türkiye)				
015	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 Marchalina hellenica				
	İsmail Emir Akyıldız - Altıparmak Food Industry and Trade Inc (Türkiye)				
O16	Changes in biochemical properties of royal jelly by different storage conditions and dif-				
	ferent 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)

<b>O17</b>	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 (Micromesistius
	poutassou) protein hydrolysates
	Niloofar Shekoohi - University of Limerick (Ireland)
O20	Neutrase-alcalase combined hydrolysation of protein isolates from hazelnut meal: Trans-
	forming 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 in vitro digestion provides better bioactive peptide rele-
	ase and phenol delivery to colon
	Aytül Hamzalıoğlu - 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 hydrop-				
	hobic 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 Byproducts

#### **Moderators:**

Petras Rimantas Venskutonis (Kaunas University of Technology, Lithuania) Amin Ismail (Universiti Putra Malaysia, Malaysia)

O28	Disactives from small fruit messagging by meduate and vyagta for functional foods and			
020	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 pro-			
	cessed 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 avoca-			
	do seed powder as a culinary additive			
	Nour Awad - Ondokuz Mayıs University (Türkiye)			
O32	Effects of Cystoseira barbata 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
	<b>Emilio Ros</b> - 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 (Corylus avellana 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 in vitro 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 Reg3β exp-
	ression in the intestine of mice
	Dina Mustika Rini - Hiroshima University (Japan)
O40	Mutation strategies for glucansucrase E81 to produce novel glucans and gluco-oligosac- charides
	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 func-
	tional 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
	(Canarium odontophyllum 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 molecu-
	lar mechanisms
	Christine Morand - INRAE (France)
O51	In vitro 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 cardiome-
	tabolic 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 referen-
	ce 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 Schizophyl-
	lum commune (fries) mushroom
	Amin Ismail - Universiti Putra Malaysia (Malaysia)
O58	Antidegenerative agent from Indonesian food sources: In vitro and in vivo 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)

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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 Sphaeranthus indicus and Garcinia mangostana 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-inosi-
	tol-alleviated aging in Caenorhabditis elegans
	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 Saccharomy-
	ces cerevisiae in fermented foods
	Cemile Yılmaz - Hacettepe University (Türkiye)
O71	The production of fermented dairy product supplemented with Spirulina platensis
	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 magnesi-
	um-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 Ağırbaşlı - İzmir Institute of Technology (Türkiye)
O76	Determination of vitexin content in hawthorn (Cretaceous orientalis) and development
	of vitexin enriched capsul and powder products
	Hilal Akın - TUNAY Food (Türkiye)
<b>O77</b>	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, Turkiye)

O78	Cereals and legumes as a source of phenolic and polyphenolic compounds
	Ryszard Amarowicz - Institute of Animal Reproduction and Food Research (Poland)
<b>O79</b>	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 (Pandanus conoideus) oil ma-
	yonnaise 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)
<b>O87</b>	Alleviation of high-fat diet-induced mouse liver damage by chlorella extract and its phe-
	nethylamine <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 Trigonella foenum-graecum seed extract in premenopausal women
	with polycystic ovary syndrome (PCOS): A double-blind, placebo-controlled clinical in-
	vestigation.
	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)

<b>O91</b>	An integrated algal biorefinery concept for carbon-negative functional food components
071	
	Berat Haznedaroğlu - Boğaziçi University (Türkiye)
O92	Reversibility of sarcopenia by <i>Ishige okamurae</i> and its active derivative diphloroetho-
	hydroxycarmalol: aging rodent and human clinical study
	Jimin Hyun - Jeju National University (Republic of Korea)
<b>O93</b>	Optimising cultivation of the Giant Kelp for bioproduct production
	Diane Purcell - Teagasc   Agriculture and Food Development Authority (Ireland)
<b>O94</b>	Composition, properties, and bioactive absorption of functional foods prepared from un-
	dervalued 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 Chlorella vulgaris 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)
<b>O97</b>	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 (Oklahama State University, USA)

	<u> </u>
<b>O98</b>	Effect of encapsulation techniques on physical properties and shelf stability of fish oil-w-
	hey protein microcapsules
	Nurhan Turgut Dunford – Oklahoma State University (USA)
<b>O99</b>	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 symmetri-
	cal 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 in vitro gastrointestinal digestion
	Kadriye Kasapoğlu - İstanbul Technical University (Türkiye)
O102	Encapsulation of omega-3 fatty acids into starch nanoparticle stabilized pickering emul-
	sions
	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 fun-
	ctional 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 aga-
	inst 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 <b>İffet İrem Çankaya -</b> Hacettepe University (Türkiye)
O109	Importance of the quality and standardization in natural products
0103	Yiğit Ege Çömlekçi - Bionorm (Türkiye)
O110	Innovation capability in medicinal and aromatic plants: Competitive advantages in Tür-
	kiye and the Pilot Business Model of LUK Botanic
	Lütfü Küçük - LUK Botanic (Türkiye)
0111	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)
0113	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)
0115	Investigation of the metabolism of black chokeberry (Aronia melanocarpa) 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> bioaccesibility 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 in vitro
	gastro-intestinal digestion
	Aysun Yücetepe - 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 Yalcın (TÜBİTAK MAM, Türkiye)

Theretrish raisin (Tebrir it in iti)		
O119	The role of behavioral economy in the future of functional food market	
	Ebru Akdağ - MUMSAD (Türkiye)	
O120	Certification of neurotoxic amino acids, $\beta$ -cyanoalanine and $\gamma$ -glutamyl- $\beta$ -cyanoalanine,	
	in red lentil	
	Ahmet Ceyhan Goren - Gebze Technical University (Türkiye)	
O121	Does drought stress only affect kale (B. oleracea) 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 proper-	
	ties of Spirulina products fermented by Lactobacillus helveticus, Kluyveromyces marx-	
	ianus, 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 complted if you are invited and are not an ISNFF member already).