



2023 Annual Conference & Exhibition Functional Foods, Nutraceuticals, Natural Health Products and Dietary Supplements

December 10-13, 2023 / Honolulu, Hawaii, USA

Program Exhibitors & Sponsors



www.isnff.org

Message from the Organizers

The International Society for Nutraceuticals and Functional Foods (ISNFF) is pleased to have its 15th International Conference and Exhibition in Honolulu, HI, USA.

The ISNFF, established in 2008, is 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 >4.0. All presenters are encouraged to submit their manuscripts to the journal. Find out more about the [journal](#) and [submission process](#) <isnff-jfb.com>. Meanwhile, there will be special issues of the journal arising from the symposium in the honor of Professor Chi-Tang Ho that will be published under the Guest Editors, Professor Min-Hsiung Pan and Xin Zhang.

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.

The 2023 conference includes participation of delegates from 20 countries with 8 plenaries, 105 orals and 72 poster presentations. 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; these were selected from among all student abstracts received. 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 and this year we have a very small one due to travel restriction and visa procurement in a timely manner.

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.






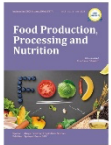

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Food Production, Processing and Nutrition

Food Production, Processing and Nutrition (FPPN) is an open-access journal published by Springer Nature BMC and sponsored by JAAS. Created in 2019, it is now indexed in many internationally recognized database such as Web of Science core collection-ESCI (2022 Impact Factor: 4.7), Scopus (CiteScore 2022:6.0), DOAJ, FSTA, etc. The journal aims to provide a unique dedicated forum for publication of the highest quality and novel contributions in the field.

(Official website: <https://fppn.biomedcentral.com>)



Exhibitors

ISNFF Booth #1	
Bionutrigen Co. Ltd. Booth #2	
JLB Investments Booth #3	

ISNFF

The INTERNATIONAL SOCIETY FOR NUTRACEUTICALS AND FUNCTIONAL FOODS (ISNFF) was established in 2008 in response to a growing recognition of the role of nutraceuticals, certain foods, natural health products and dietary supplements in health promotion and disease risk reduction. It serves to fill a visible gap in the field for providing the required scientific information and evidence for claims made for the health benefits as well as formulation of products, and to facilitate contact between the inventors and investors.

ISNFF goals are to foster a balanced approach to the understanding of both the advantages and challenges facing the scientific community, the industry and consumers in the nutraceuticals, functional foods, natural health products and dietary supplement research and development as well as product safety and sustainability with consideration of climate change and upcycling. It also engages in reviewing programs and providing consulting services to the user industry.

ISNFF has made a leap jump in serving all scientists, industry professionals and students globally and all those with an interest in the nutraceuticals and functional foods as well as other natural health products and dietary supplements. By joining ISNFF, you will automatically receive information on cutting edge discoveries in the field via our Newsletter and other means of contact. The Journal of Food Bioactives (JFB) is the official journal of the ISNFF and the IUFOST.

BIONUTRIGEN CO. LTD.

Bionutrigen Co. Ltd is making strong effort to make the world top level immune boosting, anti-viral, liver health food, slimming food and beverage products which are useful for Immune system, anti-virus, liver health, alcohol detoxification and anti-obesity without any side effect. Our product liver supplement, Slim&Slim and nature's energizers are exported to Russia, China, Canada, North America, Bangkok and EU.

JLB INVESTMENTS

JLB Investments are a health and Wellness company, using natural ways to deal with pain relief.

**ISNFF 2023
PROGRAM AT A GLANCE**

	10 th December	11 th December			12 th December	
All day		Registration			Registration	
08:15 – 08:30		Opening Ceremony				
08:30 – 10:00		Hall A (Plenary Speakers – I) PL 1 PL 2 PL 3			Hall A (Plenary Speakers - II) PL 4 PL 5 PL 6	
10:00 – 10:20		Break - Posters			Break	
10.20 – 12:20		Hall A	Hall B	Hall C	Hall A	Hall B
		Session 1: Polyphenols, flavonoids, carotenoids, and others - I	Session 2: Proteins, peptides, and beyond - I	Session 3: Clinical and pre-clinical studies, formulations, and marketing	Session 10: Bioactive and products from tree nuts and their health effects	Session 11: Aquatic products/by-products and seaweeds as sources of bioactives and functional food ingredients
12:20 – 13:30		Lunch Break– Posters			Lunch Break – AGM Meeting	
13.30 – 15:30	Registration	Session 4: Nutraceuticals and functional foods – Symposium in honor of Professor Chi-Tang Ho - I	Session 5: Polyphenols, flavonoids, carotenoids, and others - II	Session 6: Proteins, peptides, and beyond - II	Session 12: Nutraceuticals and functional foods – Symposium in honor of Professor Chi-Tang Ho - II	Session 13: Proteins, peptides, and beyond - III
15.30 – 15:45		Break - Posters			Break/Poster Session	
15:45 – 17:45		Session 7: Gut microbiome and probiotics, and controlled release	Session 8: Functional foods in health and wellness	Session 9: Fiber, minerals, and phytonutrients: Effects and health	Session 14: Encapsulation, delivery system, and bioavailability	Session 15: Obesity, diabetes, and metabolic syndrome
19:00 – 22:00		Welcome Cocktail/Posters			Congress Gala Dinner and Awards*	

13 th December	
All day	Registration
08:15 – 08:30	
08:30 – 10:00	Hall A (Plenary Speakers - III) PL 7 PL 8
9:30 – 10:00	Break
10:00 – 12:00	Hall A
	Hall B
	Session 16: Berries, small fruits, and by-products in health and disease
	Session 17: Extracts, herbal, and others
None	Break
12:00 – 13:15	Session 18: Flash Talks
13:15 – 13:45	Break
13:45 – 14:15	Closing and Flash Talk Award Ceremony

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

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

PL: Plenary (30 min presentation including questions).

S: Session (20 min presentation including questions).

Flash Talk (5 min presentation including questions).

PLENARY SPEAKERS

Moderators: Bradley Bolling (USA) and Cesarettin Alasalvar (Turkey)

PL1	#167	Sustainable Bioproducts to Promote a Circular Economy Colin Barrow – Deakin University (Australia)
PL2	#142	Bioactive Peptides in Food: High Activity upon Digestion but Low Bioavailability – Why? Kenji Sato - Kyoto University (Japan)
PL3	#65	Fraudsters Beware: Orthogonal Analytic Approaches to Prevent Adulteration of Nutraceuticals Christian Krueger – Complete Phytochemical Solution, LLC (USA)

Moderators: Ronald Pegg (USA) and Jerzy Zawistowski (Canada)

PL4	#166	Flavor Challenges in Functional Foods Research Keith Cadwallader – University of Illinois at Urbana-Champaign (USA)
PL5	#67	Black Raspberry Improves Helicobacter Pylori Infection and Alzheimer Disease Chin-Kun Wang – Chung Shan Medical University (Taiwan)
PL6	#213	Application of Fish Processing By-products in Human Muscle Growth Functional Ingredients to Protect against Sarcopenia You-Jin Jeon – Jeju National University (Korea)

Moderators: Chin-Kung Wang (Taiwan) and Colin Barrow (Australia)

PL7	#166	Making the Case for Flaxseed as an Ideal Dietary Supplement Grant Pierce – University of Manitoba (Canada)
PL8	#176	New Non-reducing Dextrin Inhibits Maillard Reaction and Protects Drugs Bo Jiang – Jiangnan University (China)

ORAL PRESENTATIONS

Session 1: Polyphenols, Flavonoids, Carotenoids, and Others - I

Moderators: Rong Tsao (Canada) and Charles Hu (USA)

O1	#93	The polyphenolic profile of whole garlic plants depends on the harvesting time Jerzy Zawistowski – University of British Columbia (Canada)
O2	#39	Molecular mechanisms of theaflavins-stimulated glucagon like peptide-1 secretion from enteroendocrine L-cells Kevin Odongo – Kobe University (Japan)
O3	#80	Dietary polyphenols beyond being antioxidants: their preventive effect on low-grade chronic inflammation-associated metabolic disorders Rong Tsao – Agriculture and Agri-Food Canada (Canada)
O4	#150	Modulation of the immune-metabolic phenotype through a high phenolic potato diet Sahar Toulabi – Colorado State University (USA)
O5	#190	Combination of two natural product compounds showed promising therapeutic effect against Alzheimer's disease and related dementia Rui Chang – University of Arizona (USA)
O6	#82	The applications of carotenoids in dietary supplement and evaluation of bioaccessibility with in vitro upper gastrointestinal track model Charles (Chun) Hu – Amway (USA)

Session 2: Proteins, Peptides, and Beyond – I

Moderators: Rotimi Aluko (Canada) and Jianping Wu (Canada)

O7	#174	Computational biology assisted approach in the discovery of dietary peptides with angiotensin enzyme-I inhibitory activity Kaustav Majumder – University of Nebraska-Lincoln (USA)
O8	#118	Blood pressure-reducing effect of hemp proteins and peptides: A randomized placebo-controlled human intervention trial Rotimi Aluko – University of Manitoba (Canada)
O9	#107	Rainbow trout (<i>Oncorhynchus mykiss</i>) as source of multifunctional peptides with antioxidant, ACE and DPP-IV inhibitory activities Carmen Lammi – Università Degli Studi di Milano (Italy)
O10	#101	Co-administration of collagen hydrolysate (CH) and rice protein hydrolysate (RPH) increases the bioavailability of Pro-Hyp in rat blood plasma Sri Wijanarti – Kyoto University (Japan)
O11	#36	Tripeptide IRW regulates E-cadherin/Snail signaling pathway via ACE2 in spontaneously hypertensive rats (SHRs) Jianping Wu – University of Alberta (Canada)
O12	#66	Chicken muscle protein-derived peptide VVHPKESF reduces TNF α -induced inflammation and oxidative stress in human vascular endothelial cells Hongbing Fan – University of Kentucky (USA)

Session 3: Clinical and Pre-Clinical Studies, Formulations, and Marketing

Moderators: Hitoshi Ashida (Japan) and Yuan Soon Ho (Taiwan)

O13	#8	The effect of supplementation with milk fat globule membranes on psychological health: a randomized clinical trial in healthy adults with moderate stress Naomi Davies – The University of Auckland (New Zealand)
O14	#72	Efficacy and safety of a novel dietary pyrroloquinoline quinone disodium salt (mnemoPQQ®) on muscle strength and physical function in healthy volunteers: A randomized, double-blind, placebo-controlled study Yoshiaki Shiojima – Ryusendo Co, Ltd (Japan)
O15	#58	A gallotannin-enriched Galla rhois extract (GRE) boosts brain functions in healthy volunteers: A randomized, double-blind, placebo-controlled clinical trial Christopher Baker – Global Clinicals Inc. (USA)
O16	#183	Physicians' perspective regarding direct to consumer marketing of nutraceuticals products Kamran Ali Zaman – PharmEvo and Institute for Business Management (Pakistan)

Session 4: Nutraceuticals and Functional Foods – Symposium in Honor of Professor Chi-Tang Ho – I

Moderators: Min-Hsiung Pan (Taiwan) and Zhen-Yu Chen (Hong Kong)

O17	#209	Food Bioactives and Their Metabolites Chi-Tang Ho – Rutgers University (USA)
O18	#207	Promises and challenges in developing functional foods and nutraceuticals Fereidoon Shahidi – Memorial University (Canada)
O19	#71	Molecular mechanisms of disease prevention via natural dietary phytochemicals Min-Hsiung Pan – National Taiwan University (Taiwan)
O20	#40	Quercetin inhibits truncated isoform of dopamine- and cAMP-regulated phosphoprotein as adjuvant treatment for Trastuzumab therapy resistance in HER2-positive breast cancer Yuan Soon Ho – China Medical University (Taiwan)
O21	#170	Oxidized Cholesterol increases the susceptibility of colitis in mice by causing gut microbiota dysbiosis Zhen-Yu Chen – Chinese University of Hong Kong (Hong Kong)
O22	#31	The role of dietary methylglyoxal exposure in accelerating Alzheimer's disease pathogenesis and the preventive potential of citrus flavonoid supplementation Chia-Cheng Wei – National Taiwan University (Taiwan)

Session 5: Polyphenols, Flavonoids, Carotenoids, and Others – II

Moderators: Kacie Ho (USA) and Malendez-Martinez (Spain)

O23	#18	Preventive effects of dietary fucoxanthin against ultraviolet A-induced skin photoaging in hairless mice Shuyu Liu – Kyoto University (Japan)
O24	#38	Induction mechanism of antioxidant enzymes in the liver by luteolin Hitoshi Ashida – Kobe University (Japan)
O25	#42	An overview of research for the production of healthy carotenoid-rich products in the sustainability era Antonio J. Meléndez-Martínez – Universidad de Sevilla (Spain)
O26	#206	Catechin concentration influences the non-adsorbed fraction, physical, and chemical stability of pea protein oil-in-water emulsions Kacie Ho – University of Hawaii at Manoa (USA)
O27	#5	Protein-shellac nanoparticles as a delivery vehicle for resveratrol Lingyun Chen – University of Alberta (Canada)
O28	#148	Polyamines in food systems: A focus on their role in plants and human health Trust Beta – University of Manitoba (Canada)

Session 6: Proteins, Peptides, and Beyond – II

Moderators: Jianping Wu (Canada) and Rotimi Aluko (Canada)

O29	#60	Food-derived bioactive peptides-past, today and future perspective Yoshinori Mine – University of Guelph (Canada)
O30	#2	Protein quality and physico-chemical properties of a fermented beverage with probiotic bacteria and enriched with pea and rice protein Monique Lacroix – INRS Armand Frappier Health Biotechnology (Canada)
O31	#13	Dietary Alaska pollock protein exerts superior protective effects against age-related short-term memory decline in senescence-accelerated mice Ryota Hosomi – Kansai University (Japan)
O32	#16	Elucidating the beneficial health effect of anti-inflammatory peptides derived from jack bean (<i>Canavalia ensiformis</i> (L.) DC) protein hydrolysates Bambang Dwi Wijatniko – Hiroshima University (Japan)
O33	#27	Mechanism of hydroxyproline-containing peptide cyclization after ingestion of collagen peptide Yu Iwasaki – Kasei University (Japan)
O34	#43	Pea protein-derived peptide as a potent protease inhibitor and Type 2 taste receptors T2R14 blocker Deepak Kadam – University of Manitoba (Canada)

Session 7: Gut Microbiome and Probiotics, and Controlled Release

Moderators: Hang Xiao (USA) and Hongbin Fan (USA)

O35	#201	Interplay between food and gut microbiome: Critical roles in human health Hang Xiao – University of Massachusetts (USA)
O36	#99	Effect of fermented food products as a vitamin K dietary source on the microbiota in ApoE/LDLR-/- mice Renata B. Kostogrys – University of Agriculture in Krakow (Poland)
O37	#199	Improving survival of probiotic cultures during spray-drying via modification of encapsulants with ultra high pressure homogenization George Cavender – Clemson University (USA)
O38	#23	Aqueous condition-tolerated high internal phase oil-in-water pickering emulsion for 3d printing of hydrogel for controlled release Qingye Lu – University of Calgary (Canada)

Session 8: Functional Foods in Health and Wellness

Moderators: Wallace Yokoyama (USA) and Deepika Dave (Canada)

O39	#169	Kidney beans and ground beef burgers reduce plasma and liver lipids in hamsters fed high-fat diets Wallace Yokoyama – USDA (USA)
O40	#55	A critical assessment of the whole plant-based phytotherapeutics from <i>Withania somnifera</i> with respect to safety and efficacy vis-a-vis leaf or root extract-based formulation Pawan Kumar – Chemical Resources - CHERESO (India)
O41	#30	Nutritional Yeast and lentils: novel functional ingredients in healthy extruded snacks Jose Berrios – USDA (USA)
O42	#116	From fermentation to dried snack: The journey of beetroot into functional chips Magdalena Zielinska – University of Warmia and Mazury in Olsztyn (Poland)

Session 9: Fiber, Minerals, and Phytonutrients: Effects and Health

Moderators: Kazuo Miyashita (Japan) and Heather Burke (Canada)

O43	#1	The role of dietary fibre intake and fibre intervention on depressive and anxiety outcomes: A systematic review and meta-analysis of observational studies and randomised controlled trials Hajara Aslam – Deakin University (Australia)
O44	#79	Calcium ions exert longevity effects on <i>Caenorhabditis elegans</i> through the CKK-1/CMK-1/UNC-43/DAF-16 signaling mechanisms Nae-Cherng Yang – Chung Shan Medical University (Taiwan)
O45	#51	Development and validation of a novel tool to assess sodium intake for heart disease prevention in a multiethnic population Jinan Banna – University of Hawaii at Manoa (USA)
O46	#53	Detection and enhancement of cycloartenyl ferulate content, a component of γ -Oryzanol in poultry eggs Yasutaka Shigemura – Tokyo Kasei University (Japan)
O47	#54	A plant-based multivitamin and mineral supplementation containing phytonutrients enhances the DNA repair response to metabolic challenges Jina Hong – Amway (USA)

Session 10: Bioactive and products from tree nuts and their health effects

Moderators: Elena Hemler (USA) and Guangwei Huang (USA)

O48	#164	Emerging research on almonds: gut functionality, skin health and physical performance Elena Hemler – Almond Board of California (USA)
O49	#187	Hazelnut: Nutrients, Bioactives and Health Benefits Cesarettin Alasalvar – TUBITAK, (Turkey)
O50	#203	Static in vitro gastrointestinal digestion of pecan phenolics: Effect on their antioxidant activity Ronald Pegg – University of Georgia (USA)
O51	#193	Walnut and heartnut in heart health and beyond Fereidoon Shahidi – Memorial University (Canada)
O52	#123	Nut consumption and cancer prevention Bradley Bolling – University of Wisconsin (USA)
O53	#162	Almond hulls for upcycled food applications Guangwei Huang – Almond Board of California (USA)

Session 11: Aquatic Products/By-Products and Seaweeds as Sources of Bioactives and Functional Food Ingredients

Moderators: Yvonne Yuan (Canada) and Christofera Hanny Wijaya (Indonesia)

O54	#194	Techno-economic considerations of a green chemistry ocean-based biorefinery model for the valorization of Snow crab (<i>Chionoecetes opilio</i>) processing discards Heather Burke – Marine Institute of Memorial University (Canada)
O55	#186	Atlantic Sea cucumber byproducts transformation and full value chain maximization Deepika Dave – Marine Institute of Memorial University (Canada)
O56	#205	Evaluation of the quality of commercial krill oil products in Korea Eun Joo Song – Busan Metropolitan City Inst. of Health and Environment (Korea)
O57	#192	Seaweeds as green biomass for functional foods and feeds Kazuo Miyashita – Hokkaido Bunkyo University (Japan)
O58	#117	Cultivated edible red seaweeds as functional foods and sources of nutraceuticals Yvonne Yuan – Toronto Metropolitan University (Canada)

Session 12: Nutraceuticals and Functional Foods–Symposium in Honor of Professor Chi-Tang Ho – II

Moderators: Min-Hsiung Pan (Taiwan and Zhen-Yu Chen (Hong Kong)

O59	#63	Tocotrienol-rich extract ameliorates cognitive behavioral impairment induced by methylglyoxal Yu-Kuo Chen – Fooyin University (Taiwan)
O60	#26	Antiglycative effects of rooibos against advanced glycation end products formation in a bovine serum albumin model and cookies Wei-Lun Hung – Taipei Medical University (Taiwan)
O61	#75	Toxic effect of the silver nanoparticles with different shape in food packaging materials triggered-autophagy dysfunction in liver Ying-Jan Wang -National Keng Kung University (Taiwan)
O62	#177	Development and functional assessments of edible coating on dried pineapple exposed to blanching and other processing ways Yung-Lin Chu – National Pingtung University of Science and Technology (Taiwan)
O63	#97	The investigation of water temperature for tea liquid quality and degradation of the tea flavor in fenton-type reaction systems Chih-Yu Lo – National Chiayi University (Taiwan)
O64	#103	Antiviral effect of natural herbal extracts against respiratory-associated viruses Bo Kai Chen – Ching Shan Medical University (Taiwan)

Session 13: Proteins, Peptides, and Beyond – III

Moderators: Rotimi Aluko (Canada) and Bo Jiang (China)

O65	#49	Bitter taste receptor sensitization and desensitization by food protein-derived peptides Prashen Chelikani – University of Manitoba (Canada)
O66	#74	Autoclaving treatment of soy protein isolate partially modifies amino acids residue and consequently reduces available amino acids Tomoko Asai – Nara Women’s University (Japan)
O67	#45	Physicochemical and functional properties of cereal albumin Kazumi Ninomiya – Gunma University (Japan)
O68	#188	D-allulose reduces postprandial glucose absorption in small intestine by competitive binding to glucose transport sites Bo Jiang – Jiangnan University (China)
O69	#126	The potential of fermented soybeans (Japanese natto) and its derived peptides for preventing cognitive decline Shigeru Katayama – Shinshu University (Japan)
O70	#120	Evaluation of a low-glucose gluten-free bread made from cassava (<i>Manohit esculenta</i>) and lupine (<i>Lupinus mutabilis Sweet</i>) Pedro Maldonado – National Polytechnique School (Ecuador)

Session 14: Encapsulation, Delivery System, and Bioavailability

Moderators: Nandika Bandara (Canada) and Charlene Van Buiten (USA)

O71	#173	Layered double emulsion system for improving encapsulation efficiency and emulsion properties of <i>Salmo salar</i> protein hydrolysates Nandika Bandara – University of Manitoba (Canada)
O72	#163	Bio-based conjugates and block copolymers for encapsulation and controlled delivery of biomolecules and therapeutics Aman Ullah – University of Alberta (Canada)
O73	#197	A new green approach to forming curcumin particles with improved bioactivity and bioavailability using bioaerogels and supercritical fluid technology Ozan Ciftci – University of Nebraska-Lincoln (USA)
O74	#181	3D printing of plant protein gels and bioactive delivery Roopesh Syamaladevi – University of Alberta (Canada)
O75	#165	Protein-polyphenol interactions for health promotion and disease prevention Charlene Van Buiten – Colorado State University (USA)
O76	#144	Ultrasound-assisted novel double emulsion containing grape pomace polyphenols as a delivery system to encapsulate vitamin E and omega-3 for food and dietary supplement applications Farah Hosseinian – Carlton University (Canada)

Session 15: Obesity, Diabetes, and Metabolic Syndrome

Moderators: Debasis Bagchi (USA) and Pawan Kumar (India)

O77	#61	Interplay between insulin resistance and body fat mass in evolution of perturbations linked to the metabolic syndrome in non-diabetics: Emphasis on inflammatory factors Debasis Bagchi – Adelphi University (USA)
O78	#62	Safety and efficacy of GCB-70, a standardized green coffee bean extract, in healthy weight management and ameliorating non-alcoholic fatty liver disease (NAFLD) in male and female human volunteers Manashi Bagchi – Dr Herbs LLC (USA)
O79	#57	A randomized, placebo-controlled, double-blind clinical investigation to evaluate the efficacy of a novel, proprietary <i>Trigonella Foenum-graecum</i> extract, in type 2 diabetics Pawan Kumar – Chemical Resources -CHERESO (India)
O80	#121	Anti-obesity and metabolic health impact of <i>Devaleraea mollis</i> and <i>Pyropia</i> spp. in Western diet-induced obese C57BL/6J Mice Jung Kwon – Oregon State University (USA)
O81	#59	Phytochemicals in remodeling of adipose tissue microenvironment: A therapeutic avenue in fighting obesity Ranjana Das Mondal – Jadavpur University (India)

Session 16: Berries, Small Fruits, and By-Products in Health and Disease

Moderators: Adrian de Camargo (Chile) and Farah Hosseinian (Canada)

O82	#195	Effect of ohelo berry (<i>Vaccinium calycinum</i>) on the survival of <i>Salmonella Typhimurium</i> during in vitro gastrointestinal digestion Biyu Wu – University of Hawaii at Manoa (USA)
O83	#184	Antioxidant properties of soluble and insoluble-bound phenolics from by-products of selected native berries Adriano de Camargo – University of Chile (Chile)
O84	#139	Bioavailability of a novel aronia berry polyphenol extract: rationale and methods of a single-blind, randomized, controlled, four-arm crossover pilot trial in healthy adults Yifan (Klay) Liu – University of Wisconsin (USA)
O85	#73	Improvement of black raspberry on helicobacter pylori infection and amyloid- β toxicity Yohanes Tandoro – Chung Shan Medical University (Taiwan)
O86	#196	Anti-infection and anti-inflammation properties of ohelo berry (<i>Vaccinium calycinum</i>) extract against <i>Salmonella Typhimurium</i> Biyu Wu – University of Hawaii at Manoa (USA)

Session 17: Extracts, Herbal, and Others

Moderators: Charles Hu (USA) and Kaustav Majumder (USA)

O87	#21	Development of chewable tablet with herbal extracts and propolis against Wuhan and Omicron variants of SARS-CoV-2 virus Cesarettin Alasalvar – TUBITAK (Turkey)
O88	#24	Improving the acceptability of functional candy based on a scientific approach Christofora Hanny Wijaya – Bogor Agricultural University (Indonesia)
O89	#204	Investigation of the hypocholesterolemic activity of an innovative nano-phytochemical complex Lorenza d'Adduzio – University of Milan (Italy)
O90	#100	Chrysanthemum, from traditional practice to scientific innovation Eric Du – Amway (China)

Session 18: Flash talks

Moderators: Fereidoon Shahidi (Canada) and Ronald Pegg (USA)

O91	#28	Tetrahydrocurcumin improve GLP-1 secretion in the intestinal L cells after di(2-ethylhexyl) phthalate exposure: Implication in the treatment of type 2 diabetes mellitus Choirul Anwar – National Kaohsiung University of Science and Technology (Taiwan)
O92	#140	Bioavailability of a novel aronia berry polyphenol extract: rationale and methods of a single-blind, randomized, controlled, four-arm crossover pilot trial in healthy adults Yifan (Klay) Liu – University of Wisconsin-Madison (USA)
O93	#108	Effects of long-term administration of buckwheat starch on cognitive function and gut microbiota in a senescence-accelerated mouse prone 8, SAMP8 Noriki An – Shinshu University (Japan)
O94	#11	Novel utilization of green tea waste (used tea leaves) for a fermented functional food Kieko Saito – University of Shizuoka (Japan)
O95	#22	Cognitive function in response to a pecan-enriched meal Alyssa Guadagni – University of Georgia (USA)
O96	#17	Cottonseed oil diet enrichment offers protection from worsening post-meal angiopoietin-like proteins compared to olive oil in adults with dyslipidemia. Mary Catherine Prater – University of Georgia (USA)
O97	#112	Structure, content and bioavailability of food-derived γ -glutamyl peptides in rat body and their effect on innate immunity Yudi Rahmadian – Kyoto University (Japan)
O98	#70	Purification and structural characterization of sulfated polysaccharides obtained from brown algae, <i>Sargassum binderi</i> Sang-Woon Lee – Jeju National University (Japan)
O99	#39	Molecular mechanisms of theaflavins-stimulated glucagon like peptide-1 secretion from enteroendocrine L-cells Kevin Odongo – Osaka Metropolitan University (Japan)
O100	#18	Preventive effects of dietary fucoxanthin against ultraviolet A-induced skin photoaging in hairless mice Shuyu Liu – Kyoto University (Japan)
O101	#103	Antiviral effect of natural herbal extracts against respiratory-associated viruses Bo Kai Chen – Chung Shan Medical University (Taiwan)
O102	#155	Potential functional food applications of grape leaf extracts: Vasorelaxation, cardiorenal improvement, and inflammation modulation by grape leaf extracts Hyu Yoom Kim – Wonkwang University (Korea)
O103	#27	Mechanism of hydroxyproline-containing peptide cyclization after ingestion of collagen peptide Yu Iwasaki – Tokyo Kasei University (Japan)
O104	#104	Anti-obesity effects of the acid-treated mandarin peel extract in high-fat diet-induced obese mice Yoonjeong Kim – Kyung Sung University (Korea)
O105	#77	Stabilization of an algal oil with tocopherols and phospholipids from krill oil Abreham Abad – Memorial University of Newfoundland (Canada)

POSTER PRESENTATIONS

Cancer

P1	#200	Anticancer effects of cordycepin in FGF9-induced mouse leydig cells upon tumorigenesis Bu-Miin Huang – National Cheng Kung University (Taiwan)
P2	#168	Antioxidant ingredient ergothioneine reduces side effects of oxaliplatin in cancer Kazunori Kato – Toyo University (Japan)
P3	#202	Resveratrol enhances sulfasalazine-induced ferroptosis of cancer cells Takumu Yamada – Toyo University (Japan)
P4	#76	Suppression of cuttlefish melanin on invasion and migration of human colorectal cancer cells Shu-Ling Hsieh –National Kaohsiung University of Science and Technology (Taiwan)

Inflammation/oxidative Stress

P5	#171	Auraptene prevents the damage of human vascular endothelial cells induced by excessive heat stress Kazunori Kato – Toyo University (Japan)
P6	#189	The antioxidant effect of pasta made exclusively from yellow peas in healthy people Mamoru Ito – Mizkan Holdings Co., Ltd. (Japan)
P7	#149	JBB20, the food grade ingredient shows excellent therapeutic effect in cleaning up liver diseases compared with Silymarin or milk thistle SongHae Bok – Bionutrigen Co., Ltd. (Korea)
P8	#127	Fermented <i>Protaetia brevitarsis</i> larvae improves hepatic inflammation and steatosis via TLR-4/NF- κ B and AMPK pathways in chronic ethanol-induced mice Hyo Lim Lee – Gyeongsang National University (Korea)
P9	#96	Evaluation of the antioxidant and antiglycation properties of the thearubigins and theabrownins fractions in TTES No. 18 tea Chih-Yu Lo – National Chiayi University (Taiwan)
P10	#3	Effects of traditional Okinawan vegetable extracts on inflammatory edema in acute and chronic inflammation animal models, and their possible mechanism by RAW264 cells Junichi Nagata – Fukuoka Institute of Technology (Japan)
P11	#69	Antioxidant and anti-inflammatory activities of marine microorganisms (bacteria, fungus, microalgae) collected in South Korea Hyo-Geun Lee – Jeju National University (Korea)
P12	#185	Soluble free, esterified, etherified and insoluble-bound phenolic fractions from walnut plant-based beverage residue and their antioxidant activity Adriano de Camargo – University of Chile (Chile)
P13	#89	Anti-inflammatory activity of β -casein peptides in the DSS-induced inflammatory bowel disease mice model Lina Zhang – Jiangnan University (China)

Immune Function and Gut Microbiota

P14	#124	Effect of <i>Curcuma longa</i> L. leaf hot water extract in type I allergic responses and its biological mechanism Ginnae Ahn – Chonnam National University (Korea)
P15	#68	Immuno-enhancing effect of fucoidan isolated from non-edible brown seaweed <i>Sargassum thunbergii</i> in in vitro study Kyung Yuk Ko – Jeju National University (Korea)
P16	#147	Curative effect of beta vulgaris (beetroot) in indomethacin induced peptic ulcer in Wistar rats Akanya Helmina – Federal University of Technology (Nigeria)
P17	#112	Structure, content and bioavailability of food-derived γ -glutamyl peptides in rat body and their effect on innate immunity Yudi Rahmadian – Kyoto University (Japan)
P18	#85	Altered microbiome and metabolome features provide clues in understanding strain-specific regulation of <i>Streptococcus thermophilus</i> in host Xiaoming Liu – Jiangnan University (China)
P19	#47	Collagen from sturgeon cartilage and tilapia skin ameliorates inflammatory patterns of macrophages under high glucose conditions by modulation of integrin Mei-Ling Tsai – National Kaohsiung University of Science and Technology (Taiwan)
P20	#19	Different effects of ceramide aminoethyl phosphonate from scallops and sphingomyelin from egg yolk on gut microbiota in mice Koki Sugimoto – Toyo University (Japan)

Cognition and Aging

P21	#128	Protective effect of <i>Allium ochotense</i> extract on alcohol-induced cognitive impairment in C57BL/6 mice Min Ji Go – Gyeongsang National University (Korea)
P22	#22	Cognitive function in response to a pecan-enriched meal Alyssa Guadagni – University of Georgia (USA)
P23	#108	Effects of long-term administration of buckwheat starch on cognitive function and gut microbiota in a senescence-accelerated mouse prone 8, SAMP8 Noriki An – Shinshu University (Japan)
P24	#15	The potential anti-aging effects of pomelo peel water extracts in <i>Caenorhabditis elegans</i> Chia-Cheng Wei – National Taiwan University (Taiwan)

Skin

P25	#105	Protective effect of <i>Schizonepeta tenuifolia</i> Briq. ethanolic extract against UVB-induced skin aging and photodamage in hairless mice Sang Keun Ha – Korea Food Research Institute (Korea)
P26	#33	Synergistic protective effect of nicotinamide and <i>Agastache rugosa</i> water extract against photoaging in human skin fibroblast Huijn Heo – Chungbuk National University (Korea)

P27	#137	Fucoidan refined from <i>Saccharina japonica</i> ameliorates fine dust-induced inflammation in fine dust (FD)-stimulated human keratinocytes and TPA-induced ear edema in mice Ginnae Ahn – Chonnam National University (Korea)
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Diabetes

P28	#92	Search for proteins that inhibit postprandial blood glucose elevation in rice bran. Nao Matsubara – Nihon University (Japan)
P29	#90	The hypoglycemic effect of goat milk peptide Lina Zhang – Jiangnan University (China)
P30	#138	Hypoglycemic, hypolipidemic and toxicological effects of <i>Citrullus lanatus</i> (watermelon) and <i>Carica papaya</i> (pawpaw) seed oils and flours in rats Funmilola Adefolalu – African Centre of Excellence for Mycotoxins and Food Safety/Federal University of Technology (Nigeria)
P31	#46	Tetrahydrocurcumin ameliorates GLP-1 secretion to induce glucose-stimulated insulin secretion in beta cells after chronic high glucose and di(2-ethylhexyl) phthalate exposure Ching-Shu Lai – National Kaohsiung University of Science and Technology (Taiwan)
P32	#37	Anti-diabetic activity of oat avenanthramides in insulin-resistant HepG2 cells Junsoo Lee – Chungbuk National University (Korea)
P33	#20	Restorative properties of <i>P. alba</i> extract against pancreatic β -cell destruction and hyperlipidemia in streptozotocin-rat model of Type 2 diabetes mellitus Tawakaltu Abdul Rasheed-Adeleke – Federal University of Technology (Nigeria)
P34	#84	Dose-dependent effects of xylooligosaccharides on glycemic regulation with <i>L. rhamnosus</i> CCFM1060 in diabetic mice Xiaoming Liu – Jiangnan University (China)

Cardiovascular and Metabolic Health

P35	#94	Pu-erh tea extract protects against doxorubicin-induced cachexia Chih-Yu Lo – National Chiayi University (Taiwan)
P36	#4	Cholesterol metabolism is modulated by short-term administration of Oligonol, a highly bioavailable source of low-molecular weight procyanidins rich products extracted from lychee fruit, in rats Kyoichi Osada – Meiji University (Japan)
P37	#91	Inhibition of adipocyte differentiation and fat accumulation in 3T3-L1 preadipocytes by grains-oolong tea fermenting beverage Chih-Chung Wu – Providence University (Taiwan)
P38	#155	Potential functional food applications of grape leaf extracts: Vasorelaxation, cardiorenal improvement, and inflammation modulation by grape leaf extracts Hye Yoom Kim – Wonkwang University (Korea)
P39	#208	Role of Omega-3 fatty acid in adipocyte remodeling Radha Raman Raj – University of Hawaii at Manoa (USA)
P40	#129	Screening of potential lactic acid bacteria strains with anti-obesity activity Je-Ruei Liu – National Taiwan University (Taiwan)

P41	#104	Anti-obesity effects of the acid-treated mandarin peel extract in high-fat diet-induced obese mice Yoonjeong Kim – Kyungsoong University (Korea)
P42	#34	Unsaponifiable matter from hemp (<i>Cannabis sativa</i> L.) seed suppresses adipogenesis and increase thermogenesis in 3T3-L1 adipocytes Keono Kim – Andong National University (Korea)
P43	#87	A Herb mixture to ameliorate non-alcoholic fatty liver in rat fed a high-fat diet Donghwan Kim – Korea Food Research Institute (Korea)
P44	#17	Cottonseed oil diet enrichment offers protection from worsening post-meal angiopoietin-like proteins compared to olive oil in adults with dyslipidemia Mary Catherine Prater – University of Georgia (USA)
P45	#56	Dietary tetrahydrocurcumin alleviates prenatal exposure to di(2-ethylhexyl) phthalate induces hepatic damage in high-fat-diet-fed mice F1 male offspring Meng Han Liu – National Kaohsiung University of Science and Technology (Taiwan)
P46	#32	Lactosucrose, an indigestible oligosaccharide, promotes the absorption of anthocyanins and strengthens inhibition of liver lipid peroxidation by anthocyanins in rats Rika Miyazawa – Fuji Women's University (Japan)
P47	#29	Postprandial urolithin response to a pecan enriched meal Gabriela Brocca – University of Georgia (USA)
P48	#25	Assessing the ability of dihydrosterculic acid to activate PPAR α Leah Halls – University of Georgia (USA)

Other Chronic Diseases and Toxicity

P49	#6	Geniposide attenuates muscle atrophy by inhibiting FoxO1 in senescence-accelerated mouse prone-9 Chang Hwa Jung – Korea Food Research Institute (Korea)
P50	#83	Different toxic mechanisms of advanced glycation endproducts in SV40 MES 13 kidney cells Yoonsook Kim – Korea Food Research Institute (Korea)
P51	#41	Anti-anaemic assay of freeze dried <i>Jatropha tanjorensis</i> and <i>Telfairia occidentalis</i> leave extracts in rats Funmilola Adefolalu – African Centre of Excellence for Mycotoxins and Food Safety/ Federal University of Technology (Nigeria)
P52	#10	Delphinidin suppresses disuse muscle atrophy and upregulates microRNA-23a-3p expression in extracellular vesicles derived from intestinal cells Hirofumi Tachibana – Kyushu University (Japan)

Analysis

P53	#119	Nutrient composition and functional properties of sprouted sorghum and bambara nut flour for formulation of weaning diet Akanya Helmina – Federal University of Technology (Nigeria)
P54	#70	Purification and structural characterization of sulfated polysaccharides obtained from brown algae, <i>Sargassum binderi</i> Sang-Woon Lee – Jeju National University (Korea)
P55	#50	Detection of cyclic imidazole dipeptides in meat and processed meat products Megumi Hosokawa – Tokyo Kasei University (Japan)
P56	#48	Evaluation of sphingolipids as functional food components Tatsuya Sugawara – Kyoto University (Japan)

Formulation and Processing

P57	#146	A mayonnaise naturally-enriched with high content of Z-lutein with higher physiological activity by the addition of natural spices and process optimization Cheng Yang – Jiangnan University (China)
P58	#35	Effect of sprouting on antioxidant properties and volatile sulfur compounds of garlic Jeehye Sung – Andong National University (Korea)
P59	#52	Carotenoid and mineral content of watercress (<i>Nasturtium floridanum</i>): Effects of processing, on-farm collection, and comparisons with <i>Nasturtium officinale</i> R. Br Taryn Nakamura – University of Hawaii at Manoa (USA)
P60	#125	Effect of vacuum treatment on γ -aminobutyric acid accumulation in germinated black soybeans (<i>Glycine max</i> (L.) Merr.) Min-Jie Chen – Fu Jen Catholic University (Taiwan)
P61	#114	Lipase-catalyzed incorporation of long chain omega-3 polyunsaturated fatty acids into virgin coconut oil Lanh Nguyen – Memorial University (Canada)
P62	#109	Exosome-like nanoparticles isolated from kale and their microRNA enhanced collagen production in NB1RGB skin fibroblast cells Peihan Hsu – Graduate School of Science and Technology (Japan)
P63	#106	Impact of Different Conditions of Spontaneous lactic acid fermentation on physicochemical properties of beetroot leaven Izabela Staniszewska – University of Warmia and Mazury in Olsztyn (Poland)
P64	#102	Functional properties of flaxseed albumin Yusuke Yamaguchi – Nihon University (Japan)
P65	#95	Effects of brewing conditions on the phytochemical composition of black teas and their stability of flavor compounds Chih-Yu Lo – National Chiayi University (Taiwan)
P66	#145	Low frequency – high intensity ultrasound treatment in flaxseed mucilage extraction and mucilage application as a fat replacer in hazelnut spread Farah Hosseinian – Carleton University (Canada)
P67	#110	The flavonoid contents of calamondin peel are processed with hot air drying and freezing drying and extracted with different solvents Yen Chen Tung – National Ilan University (Taiwan)
P68	#141	Okara as a source of fiber and phytonutrients in tofu after processing with ultra-high pressure homogenization

		William Kerr – University of Georgia (USA)
P69	#172	Effect of pulsed light on curcumin chemical stability and antioxidant capacity David D. Kitts – University of British Columbia (Canada)
P70	#180	A study of physicochemical and functional properties of screw press extracted protein fraction from cricket Insang Cho – Graduate School, Korea University (Korea)
P71	#77	Stabilization of an algal oil with tocopherols and phospholipids from krill oil Abreham Abad – Memorial University (Canada)
P72	#122	Pacific oysters as a model for in silico discovery of bioactive peptide Jung Kwon – Oregon State University (USA)