



**International Society for Nutraceuticals and Functional Foods**

**November 2008**

**Volume 1 Issue No.1**

## **ISNFF Newsletter**

We are pleased to share with you the information contained in this first newsletter of the International Society for Nutraceuticals and Functional Foods (ISNFF). This coincides with the admission of the ISNFF as a Disciplinary Working Group of the International Union of Food Science and Technology (IUFoST), which is an umbrella organization for sixty-eight adhering body countries and their corresponding societies. The vote for admission passed unanimously at the IUFoST General Meeting held on October 23, 2008 at the Evergreen Hotel in Shanghai.

The first meeting of the ISNFF will be held in Taichung, Taiwan on November 14-17, 2008 (For further information about the conference, please visit the ISNFF website at <http://isnff.org>). The scientific program of the Society is provided here, and this will be accompanied by an exhibition from a number of companies. Despite the short lead time, we have well over 400 registrants and some 14 companies exhibiting at the meeting. The inaugural issue of the Journal of Functional Foods, the Official Journal of the Society, will be released during the ISNFF meeting. The Journal will be published on a quarterly basis by Elsevier Publishing Company and will be available to ISNFF members at a reduced rate.

The 2009 meeting of the Society will be held in North America: time and venue to be announced shortly! Associated with the meeting, there will be a student competition. Furthermore, we will have merit awards for corporate members for outstanding ingredients, products, and services. Currently, we are making efforts to establish a fund for student fellowships and other progressive measures to encourage outstanding performance by those interested in this exciting field that affects our health and well-being. We count on your support, but this can only begin with your membership in the ISNFF.

**Fereidoon Shahidi**  
**Member, Executive Board**

## Peanuts: Mother's Nature Functional Food?

Ron Pegg<sup>1</sup> and <sup>2</sup>Kasey Heintz

<sup>1</sup>Department of Food Science and Technology, University of Georgia, Athens, GA, USA

<sup>2</sup>PMK Associates Inc., Alexandria, GA, USA

At a recent meeting, a panel of top peanut scientists highlighted the newest research concerning the health benefits of various components in peanuts & peanut skins. Evidence consistently shows that peanuts & peanut butter can play an important role in the prevention of chronic diseases. Small amounts, ~1-1½ ounces daily, can reduce the risk of heart disease by up to 50%, even in fragile populations (over 85 years old). Eating peanuts improves total & bad LDL cholesterol and triacylglycerols as well as maintaining good HDL cholesterol levels.

Peanuts & peanut butter are also important to weight management and satiety. Research shows that peanut- & peanut butter-eaters have leaner bodies than those who do not consume peanuts. Studies report that people feel fuller longer after having eaten peanuts or peanut butter versus high carbohydrate snacks. The protein and fiber in peanuts have been thought to contribute to this effect, but additional analysis shows that caloric compensation, non-absorption, and

increased resting energy expenditure may also be contributing.

Eating peanuts helps to achieve goals set by the U.S. Dietary Guidelines: they bring healthy fats, plant protein, and fiber to the diet. They also provide many nutrients that are considered hard-to-get in the American diet. Emerging research is also showing potential benefits from their many bioactives in peanuts, such as phytosterols and resveratrol.

Dixon R. Phillips, PhD, and Ronald R. Eitenmiller, PhD, of the Department of Food Science & Technology at The University of Georgia reported the newest data on the composition of peanuts, which was representative of the types and cultivars grown in the U.S. under

current agronomic practices. Highlights from the findings showed that in terms of fatty acids, peanuts are highest in oleic acid with some variation in the amounts of oleic acid and linoleic

acid between cultivars. When it comes to protein, peanut protein is one of the richest sources of arginine. Levels of arginine were consistent with past years for Runner and Spanish peanuts, and were significantly ( $p < 0.05$ ) higher in Virginia peanuts. Arginine is a precursor to nitric oxide, whereas lysine can inhibit its production. The high arginine to lysine ratio in peanuts contributes to higher nitric oxide levels, which can improve vascular health.



Additionally, total vitamin E levels are high in both normal and high-oleic type peanuts, with Runner's



having the greatest amounts.  $\alpha$ - &  $\gamma$ -Tocopherol are the most significant tocopherols in all

types/cultivars of peanuts; trace amounts of  $\beta$ - and  $\delta$ -tocopherols are also detectible.

Timothy H. Sanders, PhD, of the Market Quality and Handling Research Unit at USDA, ARS, SAA in Raleigh, NC reported that many other bioactive components are present in peanuts, which include the following: flavonols, isoflavones, saponins, polyphenols (e.g. resveratrol), sterols, phenolic acids, and catechins. Sanders shared cutting-edge data on a study designed to look at the non-oil components in peanuts. Fat-free peanut flour, which contains protein and bioactives was studied to determine if, in addition to the healthy oils in peanuts, these components contribute to the cardiovascular benefits that are seen by eating a small amount of peanuts daily. In the study, hamsters were fed diets similar in fat, carbohydrate, and protein. All diets were high in fat and cholesterol but whole peanuts, peanut oil, or fat-free peanut flour, were each substituted in the three test diets. All of those consuming the peanut test diets showed a significant ( $p < 0.05$ ) decrease in total and bad LDL cholesterol, indicating that, in addition to the healthy oils in peanuts, the fat-free

peanut flour, which contains protein and other functional components is having a cardio-protective effect.

Ronald B. Pegg, PhD, of the Department of Food Science & Technology at The University of Georgia, Athens Campus, and James Hargrove, PhD, of the Department of Foods and Nutrition at The University of Georgia, Athens Campus commented on the antioxidant, radical-scavenging, and biological activities of the phytochemical constituents of peanut kernels and their skins. New data showed that the antioxidant capacity of peanuts correlated with total phenolics data and was even retained or improved through modern processing methods, including dry roasting and oil roasting. In addition, peanut skins exhibited high antioxidant capacity, due to their high proanthocyanidin content, which were also shown to be effective in inhibiting enzymes of starch digestion (*i.e.*,  $\alpha$ -amylase, glucosidase) and in blocking protein glycation *in vitro*.

The symposium combined a solid body of evidence on the various components on peanuts and considered how they may be useful in functional foods for health.



## Dietary Phenolics as Reactive Carbonyl Scavengers: Potential Impact on Human Health and Mechanism of Action

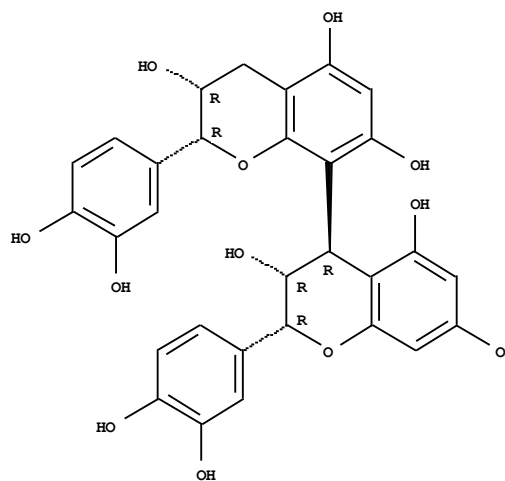
Mingfu Wang<sup>1</sup> and Chi-Tang Ho<sup>2</sup>

<sup>1</sup>School of Biological Sciences, University of Hong Kong, Hong Kong SAR, China

<sup>2</sup>Department of Food Science, Rutgers University, New Brunswick; NJ, USA

Non-enzymatic modifications of proteins have been implicated in the pathogenesis of diabetes, atherosclerosis, neurodegenerative diseases, and normal aging. The modifications can arise from direct exposure to reactive oxygen, chlorine, or nitrogen species, and from reaction with low-molecular-weight reactive carbonyl species (RCS), which originate from a multitude of mechanistically related pathways, like glycation, sugar autoxidation, lipid peroxidation and UV-photodamage. The accumulation of various RCS derived from carbohydrates or lipids, as well as their subsequently induced protein modifications, is proposed to constitute a state of “carbonyl stress”. These RCS are responsible for the formation of advanced glycation end products (AGEs) and advanced lipoxidation end products (ALEs), and their roles in the development of various aging-related diseases have been increasingly recognized. Consequently, there is a prompt need to develop effective strategies to protect us from RCS-associated

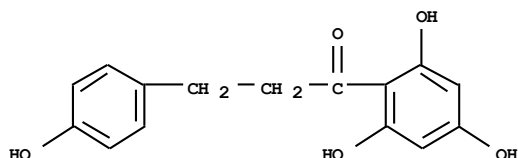
pathogenic conditions, and this will remain one of the major research directions that merit global intention. A very limited number of chemical agents have been found to suppress or prevent excessive generation and accumulation of cellular RCS; their therapeutic potential has only been recently recognized. These compounds exert their action by interfering with different phases of the reaction cascades, such as by acting as antioxidants, by chelating metal ions or by directly trapping RCS. As free radical-mediated and oxidative reactions are known to be involved in the process of glycation and lipoxidation, it is not a surprise that antioxidants may be effective inhibitors of glycation and/or lipoxidation in *in vitro* assays. However, numerous clinical trials have failed to provide conclusive evidence for the efficacy of antioxidant therapy in several chronic



**Structure of Procyanidin B2**

diseases. These findings have led to doubt about the effectiveness of chemical agents that behave solely as antioxidants in alleviating carbonyl stress. An integration of these previous findings and information

regarding the formation pathways of RCS, AGEs, and ALEs have enabled us to put forward the hypothesis that chemical agents possessing dual mechanisms of action, namely antioxidant and RCS-trapping activities, are likely more promising candidates for developing into disease preventive



### Structure of Phloretin

agents/pharmaceutical leads for age-related diseases.

In our studies, various natural extracts and phytochemicals have been evaluated for their effects on RCS-induced modification of protein structure. Yet, only a very limited number of natural products have demonstrated RCS-trapping capacity. Our recent research found that catechin, epicatechin, EGCG, procyanidin B<sub>2</sub>, other proanthocyanidins, phloretin, phloridzin, and theaflavins can effectively trap methylglyoxal (MGO), with better trapping capacity than aminoguanidine, the first AGE inhibitor explored in clinical trials. Structural examination of catechins and procyanidin B<sub>2</sub> revealed that they both contain unique nucleophilic moieties, which might contribute to their MGO-trapping capacity. Therefore, these compounds represent a new group of 1,2-dicarbonyl scavenging agents. We recently also found that catechins and proanthocyanidins can directly trap lipoxidation-related unsaturated

carbonyl compounds, such as acrolein (ACR), suggesting these compounds are also of great potential to prevent the formation of ALEs. These hypotheses, however, must be proven by *in vitro* and *in vivo* studies with the ALEs and AGEs being accurately analyzed. Different from traditional views on drugs (*i.e.*, most drugs elicit their effects *via* transient interactions with membrane-spanning receptors that modulate cellular signaling pathways), ideally, the carbonyl scavengers should show minimal activity toward drug receptors, and thereby minimize unwanted pharmacological effects. Rather, the administration of carbonyl scavengers should proceed in the expectation that they rapidly sequester carbonyl species in cells, thus blocking the adduction of macromolecules and any downstream damage. Whether these phenolic compounds can selectively perform this function also demands further study.

### References

- Peng, X.; Cheng, K.W.; Ma, J.; Chen, B.; Ho, C.-.; Lo, C.; Chen, F.; Wang, M. Cinnamon bark proanthocyanidins as reactive carbonyl scavengers to prevent the formation of advanced glycation endproducts. *Journal of Agricultural and Food Chemistry* (2008), 56(6), 1907-1911.
- Shao, X.; Bai, N.; He, K.; Ho, C.-T.; Yang, C.S.; Sang, S. Apple polyphenols, phloretin and phloridzin: New trapping agents of reactive dicarbonyl species. *Chemical Research in Toxicology* (2008), 21(10), 2042-2050.
- Sang, S.; Shao, X.; Bai, N.; Lo, C.Y.; Yang, C.S.; Ho, C.-T. Tea polyphenol (-)-epigallocatechin-3-gallate: a new trapping agent of reactive dicarbonyl species. *Chemical Research in Toxicology* (2007), 20(12), 1862-1870.
- Lo, C.Y.; Li, S.; Tan, D.; Pan, M.H.; Sang, S.; Ho, C.-T. Trapping reactions of reactive carbonyl species with tea polyphenols in simulated physiological conditions. *Molecular Nutrition & Food Research* (2006), 50(12), 1118-1128.



**International Society for Nutraceutical and Functional Foods**

**ISNFF Membership Application - 2009**

First Name: \_\_\_\_\_ Middle Name: \_\_\_\_\_  
Family Name: \_\_\_\_\_ Title: \_\_\_\_\_

Affiliation: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Email: \_\_\_\_\_ Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

Membership Type: \_\_\_Member \_\_\_Student Member \_\_\_Corporate Member

Payment:

Money Order: \_\_\_\_\_

Credit Card: \_\_\_ VISA Credit Card #: \_\_\_\_\_  
\_\_\_ MASTERCARD Card Holder: \_\_\_\_\_  
Expiry Date: \_\_\_\_\_

Membership Rates: Add 13% for HST (Harmonized Sales Tax):

Active member US \$ 95  
Student member US \$ 45  
Corporate member US \$ 2,000

Optional Subscription to Journal of Functional Foods:

Annual subscription US \$100 (Add 13% HST) \_\_\_\_\_

Please fill in the form and fax to Conference Secretary, Ms. Peggy-Ann Parsons at (709) 737-4000 or scan and email to [pparsons@mun.ca](mailto:pparsons@mun.ca)



**International Society for Nutraceuticals and Functional Foods**

# **ISNFF Annual Conference and Exhibition November 14-17, 2008 Taichung, Taiwan**

## **PROGRAM**

**November 14, 2008**

**Registration (4:00-7:00 pm)**

**November 15, 2008**

**Opening Ceremony (8:15-9:00 am)**

## **ORAL SESSION**

**Plenary I (9:00-10:30 am)**

**Chairs: Fereidoon Shahidi and Chin-Kun Wang**

- O1. RECENT ADVANCES IN FUNCTIONAL FOOD RESEARCH IN TAIWAN  
**Lucy Sun Hwang, National Taiwan University (Taiwan)**
- O2. EMERGING PERSPECTIVES IN RESEARCH AND DEVELOPMENT OF FUNCTIONAL FOODS  
IN JAPAN  
**Makoto Shimizu, The University of Tokyo (Japan)**
- O3. SCIENTIFIC AND REGULATORY CHALLENGES IN RESEARCH ON DIETARY SUPPLEMENTS,  
NUTRACEUTICALS AND FUNCTIONAL FOODS  
**Joseph Betz, Office of Dietary Supplements, NIH (USA)**  
**Fereidoon Shahidi, Memorial University (Canada)**

**Nutrition Break 10:30 – 11:00 am**

## **Session 1: Cancer Risk Reduction by Nutraceuticals and Herbal Products (11:00 am-12:20 pm)**

**Chairs: Hyong Joo Lee and Rui Hai Liu**

- O4. PHYTOCHEMICALS FOR CANCER PREVENTION: MECHANISMS OF ACTION  
**Rui Hai Liu – Cornell University (USA)**
- O5. ANTICARCINOGENIC ACTIVITY OF ARTEPILLIN C IN BRAZILIAN PROPOLIS FOLLOWING TO ITS BIOAVAILABILITY  
**Kazuku Kanazawa – Kobe University (Japan)**
- O6. CANCER CHEMOPREVENTIVE PHYTOCHEMICALS DERIVED FROM MEDICINAL HERBS AND SPICES  
**Young-Joon Surh – Seoul National University (Korea)**
- O7. MEK AND FYN ARE DIRECT MOLECULAR TARGETS FOR CHEMOPREVENTION WITH MYRICETIN AND QUERCETIN  
**Hyong Joo Lee – Seoul National University (Korea)**

## **Session 2: Nutraceutical and Functional Foods in Human Health: From Bioprospecting to Healthful Products (11:00 am – 12:20 pm)**

**Chairs: Gow-Chin Yen and and Lucy Yu**

- O8. BOREAL BIOPROSPECTING: APPLICATION IN HUMAN HEALTH  
**Mamdouh M. Abou-Zaid, John Thor Arnason, Jordana E. Fera, Domenic A. Lombardo, Melanie Coppens**  
**Great Lakes Forestry Centre (Canada)**
- O9. *GANODERMA LUCIDUM* TRITERPENOIDS AND THEIR BIOACTIVITY  
**Gow-Chin Yen, Chia-Jui Weng**  
**National Chung Hsing University (Taiwan)**
- O10. HEALTHFUL *TRANS*-FREE MARGARINES PREPARED WITH ENZYMATICALLY-SYNTHESIZED STRUCTURED LIPIDS  
**Casimir C. Akoh, Byung Hee Kim, Stephen E. Lumor**  
**The University of Georgia (USA)**
- O11. PSYLLIUM DERIVATIVES AND THEIR HEALTH BENEFICIAL PROPERTIES  
**Liangli (Lucy) Yu – University of Maryland (USA)**

**Lunch Break/Poster Presentation 12:20 – 2:00 pm**



**Session 3: Cardiovascular Disease Risk Reduction: Cholesterol-Lowering and Other Nutraceuticals  
(2:00–3:40 pm)**

**Chairs: Jerzy Zawistowski and Zhen-Yu Chen**

- O12. PHYTOSTEROLS IN HEART HEALTH  
**Jerzy Zawistowski – University of British Columbia (Canada)**
- O13. CONSUMPTION OF WOOD STEROLS BUT NOT POLICOSANOLS ALTERS LIPID PROFILES AND ANTIOXIDANT STATUS IN NORMAL AND HYPERCHOLESTEROLEMIC RATS  
**David D. Kitts, Aneta Kopec, Jerzy Zawistowski  
University of British Columbia (Canada)**
- O14. CHOLESTEROL-LOWERING NUTRACEUTICALS AND FUNCTIONAL FOODS  
**Zhen-Yu Chen – The Chinese University of Hong Kong (Hong Kong, China)**
- O15. ANTIOXIDATION AND LIVER PROTECTION OF FERMENTED NATTO LIQUID BY CLINICAL TRIAL  
**Chin Kun Wang – Chung Shan Medical University (Taiwan)**
- O16. CHEMICAL AND CYTOACTIVE CLASSIFICATION OF SOYA SAPONINS FROM SOY  
**David G. Popovich, Wei Zhang  
National University of Singapore – (Singapore)**

**Session 4: Nutraceuticals and Functional Fruits/Beverages  
(2:00–3:40 pm)**

**Chairs: Giuseppe Mazza and James Swi-Bea Wu**

- O17. ANTHOCYANINS AND POLYPHENOLS AND THEIR HEALTH BENEFITS  
**Ronald E. Wrolstad – Oregon State University (USA)**
- O18. ANTHOCYANINS AND HEART HEALTH: THE SCIENTIFIC EVIDENCE  
**Giuseppe (Joe) Mazza – Agriculture and Agri-Food Canada (Canada)**
- O19. BLUEBERRY SKIN ETHANOL EXTRACT ACTIVATES PPARA IN HAMSTER LIVER  
**Agnes M. Rimando, Wallace Yokoyama, Cassia Mizuno, Glenn Bartley, Shabana I. Khan  
USDA (USA)**
- O20. ANTIOXIDANT ACTIVITY AND PROTEIN INTERACTION POTENTIALS OF GOJI BERRY PHENOLICS  
**Marian Naczki, Kristine Johansen, Fereidoon Shahidi, Gerrard Marangoni, Ryszard Zadernowski  
St. Francis Xavier University (Canada)**

- O21. NEUROPROTECTIVE EFFECTS OF RESVERATROL DERIVATIVES ON PARKINSON'S DISEASE  
**Mingfu Wang**, Jianfei Chao, Ka-Wing Cheng, Raymond Chuen-Chung Chang  
The University of Hong Kong (Hong Kong, China)

**Nutrition Break 3:40-4:00 pm**

### **Session 5: Regulations, Research, Health Claims and Methodologies (4:00–5:40 pm)**

**Chairs: Alister Muir and Heizo Tanaka**

- O22. INTERNATIONAL REGULATION FOR FUNCTIONAL FOODS AND NUTRACEUTICALS (USA AND EUROPE)  
**Jerzy Zawistowski – University of British Columbia (Canada)**
- O23. NUTRACEUTICALS, FUNCTIONAL FOODS AND NUTRIGENOMIC RESEARCH AND DEVELOPMENT IN CANADA  
**Rickey Y. Yada – AFMNet (Canada)**
- O24. CURRENT SYSTEM FOR REGULATION OF HEALTH FOODS OR DIETARY SUPPLEMENTS IN JAPAN - FOOD WITH NUTRIENT FUNCTION CLAIM, AND FOOD FOR SPECIFIED HEALTH USE  
**Heizo Tanaka – Koshien University (Japan)**
- O25. THE ROLE OF ANALYTICAL CHEMISTRY IN REDUCING AMBIGUITY AND UNCERTAINTY IN THE SCIENCE SUPPORTING HEALTH CLAIMS  
**Alister D. Muir – Agriculture & Agri-Food Canada (Canada)**
- O26. DETECTION OF ISOFLAVONES AND DEGRADATION PRODUCTS IN DIFFERENT PLANTS, FOODS AND HUMAN BIOLOGICAL FLUID SAMPLES  
**Rong Tsao**, Suqin Shao, Alison M. Duncan, Massimo Marcone, Istvan Rajcan  
Agriculture and Agri-Food (Canada)

### **Session 6: Marine and Other Nutraceuticals and their Delivery and Health Effects (4:00-6:00 pm)**

**Chairs: Colin Barrow and Georges Halpern**

- O27. OMEGA-3 FATTY ACIDS IN HEALTHY FOODS AND THEIR BENEFITS FOR BRAIN HEALTH  
**Colin J. Barrow – Ocean Nutrition Canada Ltd. (Canada)**

- O28. DEVELOPMENT OF MARINE NUTRACEUTICALS FROM SEAFOOD PROCESSING BY-PRODUCTS USING MEMBRANE BIOREACTOR  
**Se-Kwon Kim – Pukyong National University (South Korea)**
- O29. MICROENCAPSULATION TECHNOLOGY WITH POTENTIAL FOR DELIVERY OF A COCKTAIL OF BIOACTIVES TO THE GI TRACT  
**Luz Sanguansri, Mary Ann Augustin**  
**CSIRO Preventive Health National Research Flagship (Australia)**
- O30. APPLICATIONS OF DOCOSAHEXAENOIC ACID (DHA) IN FOODS AND BEVERAGES: OUR EXPERIENCES  
**Jimbin Mai, Wei Wang-Nolan, Bruce Artman**  
**Martek Biosciences Corporation (USA)**
- O31. APPLICATION AND IMPLICATION OF NANO-ENCAPSULATION TECHNOLOGY AND NUTRACEUTICALS DEVELOPMENT  
**Li-CyuanWu, Jeng-Sheng Chang, Shie-Bin Chang, Ke Liang B. Chang, Zwe-ling Kong National Taiwan Ocean University (Taiwan)**
- O32. NOVEL ANTI-INFLAMMATORY MECHANISMS OF LYPRINOL®  
**Georges M. Halpern – PolyU (Hong Kong, China)**

**Opening Mixer 7:00 – 9:00 pm**

**November 16, 2008**

**Plenary II**

**Chairs: Lucy Hwang and Kyung-Whan Chang**

- O33. FOUND IN TRANSLATION: RELEVANT NUTRACEUTICAL SCIENCE AS A LINK TO CONSUMER CONFIDENCE  
**Anthony Almada, IMAGINutrition, Inc. (USA)**
- O34. POLYPHENOLS AND HEALTH - TOWARDS NUTRITIONAL RECOMMENDATIONS  
**Augustin Scalbert, INRA (France)**
- O35. COMPENDIAL STANDARDS, MONOGRAPH SPECIFICATIONS AND THEIR ROLE IN THE ASSURANCE OF SAFETY AS WELL AS QUALITY OF NUTRACEUTICALS AND FUNCTIONAL FOOD INGREDIENTS  
**Jim Griffiths – US Pharmacopeia (USA)**
- O36. COLLOIDAL SYSTEMS FOR DELIVERY OF BIOACTIVE LIPIDS INTO FUNCTIONAL FOODS  
**Eric A. Decker, D. Julian McClements  
University of Massachusetts (USA)**

**Nutrition Break 10:30-11:00 am**

**Session 7: Antioxidants and Health (11:00 am-12:20 pm)**

**Chairs: Young-Joon Surh and Hajime Fujii**

- O37. CELLULAR ANTIOXIDANT ACTIVITY ASSAY FOR ASSESSING ANTIOXIDANT FUNCTION  
**Rui Hai Liu – Cornell University (USA)**
- O38. AMELIORATION OF ABDOMINAL OBESITY BY POLYPHENOLICS (OLIGONOL) FROM LYCHEE  
**Jun Nishihira, M. Sato, H. Sato, K. Kitadate, K. Wakame, H. Fujii  
Amino Up (Japan)**
- O39. DIETARY QUERCETIN GLYCOSIDES: A REVIEW OF CURRENT UNDERSTANDING OF METABOLISM AND ANTIOXIDANT ACTION  
**H.P. Vasantha Rupasinghe – Nova Scotia Agricultural College (Canada)**
- O40. DEVELOPMENT OF ASTRAGALIN USING SELECTIVE DEGLYCOSYLATION TECHNOLOGY FROM GREEN TEA SEED AND STUDY ON ITS BIOLOGICAL ACTIVITIES  
**Hye Yoon Park, Jun Seong Park, Dong-Hyun Kim, Duck Hee Kim, Han Kon Kim  
Skin Research Institute (South Korea)**

**Session 8: Nutraceuticals and Natural Health Products:  
Metabolic Syndrome, Glycemic Control and Other Diseases  
(11:00 am-12:20 pm)**

**Chairs: Najla Guthrie and Han-Hsin Chang**

- O41. EFFECT OF DIABETINOL™ ON GLYCEMIC CONTROL IN SUBJECTS WITH IMPAIRED FASTING GLUCOSE: A DOUBLE-BLIND PLACEBO-CONTROLLED PILOT CLINICAL STUDY  
William Judy, Willis Stogsdill, Daniel Judy, Jan Judy, Malkanthi Evans, **Najla Guthrie**  
**KGK Synergize, Inc. (Canada)**
- O42. DIETARY FRUCTOSE-INDUCED OXIDATIVE STRESS AND ALLEVIATION BY SOLANUM MURICATUM INTAKE IN A MOUSE MODEL  
**Han-Hsin Chang**, Cheng-Chin Hsu, Shiau-Ting Hong, Ya-Shiuan Lin, Chu-Chyn Ou, Yi-Jen Li  
**Chung Shan Medical University (Taiwan)**
- O43. SOLUBLE CELLULOSE DIETARY FIBER PREVENTS OBESITY RELATED METABOLIC DISEASES IN HAMSTERS  
**W. Yokoyama**, W.H. Anderson, S.A. Young, Y-J. Hong, G. Bartley  
**USDA (USA)**
- O44. EFFECTS OF ORAL ADMINISTRATION OF UNDENATURED TYPE II COLLAGEN (UC-II) IN OSTEOARTHRITIS: A RANDOMIZED, DOUBLE-BLIND CLINICAL TRIAL  
**Manashi Bagchi – InterHealth Nutraceuticals Inc. (USA)**

**Lunch Break /Poster Presentations (12:20-2:00 pm)**

**Session 9: Nuts in Health and Wellness (2:00-3:20 pm)**

**Chairs: Cesarettin Alasalvar and Lee-Yan Sheen**

- O45. PHYTONUTRIENTS OF HAZELNUT AND HAZELNUT OIL IN HEALTH  
**Cesarettin Alasalvar – TÜBİTAK Marmara Research Center (Turkey)**
- O46. PECANS (*CARYA ILLINOINENSIS* (WANGENH.) K. KOCH): AN UNTAPPED SOURCE OF BIOACTIVES FOR FUNCTIONAL FOOD APPLICATIONS  
**Ronald B. Pegg**, Ryszard Amarowicz, Ronald R. Eitenmiller  
**The University of Georgia (USA)**
- O47. BIOACTIVITIES ASSESSMENT OF PEANUT STILBENOIDs  
**Robin Y.-Y. Chiou – National Chiayi University (Taiwan)**

- O48. ANTIDIABETIC AND ANTIOXIDANT ACTIVITY OF ALMONDS  
**C-Y. Oliver Chen**, Jen-Fang Liu, Xudong Jia  
Jean Mayer USDA Human Nutrition Research Center on Aging (USA)

## **Session 10: Nutrigenomics and Nutritional Genomics in Human Health (2:00-3:40 pm)**

**Chairs: Debasis Bagchi and Sue-Joan Chang**

- O49. NUTRIGENOMIC PERSPECTIVES ON CHEMOPREVENTIVE AND CYTOPROTECTIVE EFFECTS OF PHYTONUTRIENTS  
**Young-Joon Surh** – Seoul National University (South Korea)
- O50. PHYSIOLOGICAL GENOMIC APPROACH TO ASSESS THE ANTI-OBESITY POTENTIAL OF A NOVEL CALCIUM/ POTASSIUM SALT OF HYDROXYCITRIC ACID (HCA-SX)  
**Debasis Bagchi** – Houston College of Pharmacy (USA)
- O51. DNA MICROARRAYS REVEAL DIFFERENT GENE EXPRESSIONS IN ADIPOSE TISSUE BETWEEN OBESE AND NON-OBESE MEN INDUCED BY OVERFEEDING  
**Guang Sun**, J. Shea, C. French, J. Bishop, G. Martin, B. Roebathan, D. Pace, F. Fitzpatrick  
**Memorial University of Newfoundland (Canada)**
- O52. DIETARY SUPPLEMENTATION FOR GENOMIC STABILITY: RESULTS FROM FOUR CONTROLLED CLINICAL TRIALS  
Marc Lemay, **Yumei Lin**, Shyam Ramakrishnan  
**Nutriline Health Institute (USA)**
- O53. PROTEOMIC ANALYSIS FOR THE FUNCTIONALITY OF TOONA SINENSIS BY 2D-GEL ELECTROPHORESIS  
**Sue-Joan Chang**, Ying-Hsin Chen, Wen-Jen Yu, Chen-Chin Chang  
**National Cheng Kung University (Taiwan)**

**Nutrition Break 3:40-4:00 pm**

## **Session 11: Probiotics, Fermented and Asian Functional Foods (4:00-6:00 pm)**

**Chairs: Kun-Young Park and Frank Sherkat**

- O54. KOREAN FERMENTED FOODS: KIMCHI AND SOYBEAN FOODS AND THEIR ANTICANCER AND ANTI-OBESITY EFFECTS  
**Kun-Young Park** – Pusan National University (Korea)

- O55. FERMENTED FUNCTIONAL BEVERAGES: A SYNERGY OF PREBIOTICS, VIT. C, POLYPHENOLS AND PROBIOTICS  
**Frank Sherkat – RMIT University (Australia)**
- O56. RECENT PROGRESS ON RESEARCH AND PRODUCT DEVELOPMENT OF INDONESIAN TRADITIONAL FUNCTIONAL FOODS  
**Hanny Wijaya – Bogor Agricultural University (IBP) (Indonesia)**
- O57. APPLICATION OF RED MOLD RICE IN PREVENTIVE MEDICINE  
**Tzu-Ming Pan – National Taiwan University (Taiwan)**
- O58. PROBIOTICS ACTIVITY AND SURVIVAL IN SYNBIOTIC FOODS CONTAINING PREBIOTICS FROM JERUSALEM ARTICHOKE  
**Frank Sherkat – RMIT University (Australia)**
- O59. TEMPEH ON AGING EXPRESSION  
**Yin-Ching Chan, Pei-Tung Liang, Ming-Fu Wang  
Providence University (Taiwan)**

## **Session 12: Bioactive Peptides and Proteins in Disease Risk Reduction (4:00-5:40 pm)**

**Chairs: Eunice Li-Chan and Tzu-Mang Pan**

- O60. OPPORTUNITIES AND CHALLENGES FOR DEVELOPING BIOACTIVE PEPTIDES AS NUTRACEUTICALS AND FUNCTIONAL FOOD INGREDIENTS  
**Eunice C.Y. Li-Chan – University of British Columbia (Canada)**
- O61. CALMODULIN-DEPENDENT METABOLIC ENZYMES AS POTENTIAL TARGETS FOR FOOD PROTEIN-DERIVED BIOACTIVE PEPTIDES  
**Rotimi E. Aluko – University of Manitoba (Canada)**
- O62. SMALL PEPTIDES BASED INTERVENTIONS IN CHRONIC GUT INFLAMMATION AND ITS CELLULAR MECHANISM  
**Yoshinori Mine – University of Guelph (Canada)**
- O63. MODERATION OF HEPATITIS BY PYROGLUTAMYL PEPTIDE IN WHEAT GLUTEN HYDROLYSATE  
**K. Sato, M. Nagata, H. Sanada, Y. Egashira, S. Ono, Y. Kido, Y. Suzuki, E. Y. Park, Y. Nakamura  
Kyoto Prefectural University (Japan)**
- O64. GROWTH ENHANCEMENT OF SKIN FIBROBLAST BY FOOD DERIVED COLLAGEN PEPTIDE IN HUMAN BLOOD  
**Yasutaka Shigemura, Koji Iwai, Fumiki Morimatsu, Toshio Mori, Toshio Taira, Eun Young Park, Yasusi Nakamura, Kenji Sato  
Osaka Junior College (Japan)**

**Annual General Meeting (6:00-6:30 pm)**

**Editorial Board Meeting (*J Functional Foods*) (6:30-7:00 pm)**

**GALA DINNER (7:30-11:30 PM)**



**November 17, 2008**

**Plenary III - (8:30-10:30 am)**

**Chairs: Chi-Tang Ho and Ronald B. Pegg**

- O65. OPPORTUNITIES AND CHALLENGES OF NANOTECHNOLOGY APPLICATIONS IN NUTRACEUTICALS AND FUNCTIONAL FOODS  
**Hongda Chen – USDA (USA)**
- O66. REGULATORY FRAMEWORK FOR NATURAL HEALTH PRODUCTS IN CANADA  
**Michael Smith – Health Canada (Canada)**
- O67. NOVEL ROLE OF FLAVONOIDS AS FUNCTIONAL FOOD INGREDIENTS IN HEALTH PROMOTION: A NEW MECHANISM OF ACTION  
**Chi-Tang Ho, Mingfu Wang, Shengmin Sang, Lucy Sun Hwang  
Rutgers University (USA)**
- O68. BENCH TO BEDSIDE TO BETTER LIVING: THE EFFECTS OF FLAXSEED ON CARDIOVASCULAR HEALTH  
**Grant N. Pierce, C.M.C. Dupasquier, B.P. Ander, M.N. Richard, J.A. Austria, E. Dibrov  
University of Manitoba (Canada)**

**Nutrition Break 10:30-11:00 am**

**Session 13: Carotenoids: Functions and Health Promotion  
(11:00-12:20 pm)**

**Chairs: Kazuo Miyashita and Yoshinori Mine**

- O69. NEW ASPECT OF CAROTENOID FUNCTIONS  
T. Tsukui, T. Sashima, M. Hosokawa Masashi, **K. Miyashita  
Hokkaido University (Japan)**
- O70. PREVENTIVE EFFECT OF MARINE CAROTENOIDS AGAINST METABOLIC SYNDROME  
**T. Okada, T. Sashima, M. Hosokawa, K. Miyashita  
Hokkaido University (Japan)**
- O71. THE RELEASE MECHANISM OF  $\beta$ -CAROTENE IN OIL-IN-WATER EMULSIONS STUDIED USING AN *IN VITRO* DIGESTION MODEL: EFFECT OF OIL/WATER INTERFACE  
**Amir Malaki Nik, Milena Corredig, Amanda J. Wright  
University of Guelph (Canada)**

- O72. ANTIOXIDANT, ANTI-MUTAGENIC AND ANTI-CLASTOGENIC ACTIVITIES OF LUTEIN AND ITS EFFECT ON THE PROLIFERATION AND DIFFERENTIATION OF HUMAN ESOPHAGEAL CANCER CELLS  
**Rong Tsao, Mincheng Wang, Chanli Hu**  
**Agriculture and Agri-Food Canada (Canada)**

**Session 14: Nutraceutical Oils, their Bioactives and Health Effects (11:00 am-12:20 pm)**

**Chairs: Roland Verhé and Ching-Jang Huang**

- O73. NUTRACEUTICAL MINOR COMPONENTS IN SPECIALTY VEGETABLE AND FRUIT OILS  
**R. Verhé, V. Van Hoed, M. Andjelkovic, C. Echim**  
**Ghent University (Belgium)**
- O74. ENZYMATIC PREPARATION OF NUTRACEUTICAL PHOSPHOLIPIDS  
Y. Yamamoto, **M. Hosokawa, K. Miyashita**  
**Hokkaido University (Japan)**
- O75. BIOACTIVE PEPTIDES IN FLAX OIL AND SEED  
**Martin Reaney, Yunhua Jia, Jianheng Shen, Gui Bo**  
**University of Saskatchewan (Canada)**
- O76. PHYSIOLOGICAL EFFECTS AND APPLICATIONS OF HYDROXY FATTY ACIDS  
**Thomas A. McKeon - USDA-ARS WRRC (USA)**

**Lunch Break/Poster Presentations (12:20-2:00 pm)**

**Session 15: How to Publish Your Research? (2:00-3:20 pm)**

**Chairs: Fereidoon Shahidi and Zhen-Yu Chen**

- O77. INTRODUCTION  
Fereidoon Shahidi (**Canada**)
- O78. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY  
Zhen-Yu Chen (**Hong Kong, China**)
- O79. FOOD CHEMISTRY  
Fereidoon Shahidi, Lyndon Driscoll (**Canada and UK**)
- O80. JOURNAL OF FUNCTIONAL FOODS  
Debasis Bagchi, Fereidoon Shahidi (**USA and Canada**)

- O81. JOURNAL OF FOOD SCIENCE  
Chi-Tang Ho (USA)
- O82. MOLECULAR NUTRITION AND FOOD RESEARCH  
Chi-Tang Ho (USA)
- O83. JOURNAL OF THE AMERICAN OIL CHEMISTS' SOCIETY  
Casimir Akoh (USA)
- O84. JOURNAL OF FOOD LIPIDS  
Fereidoon Shahidi (Canada)

**Awards and Closing Ceremonies (3:20-4:00 pm)**

## POSTER SESSION

**November 15**

- P1. PHENOLIC ACIDS, PROANTHOCYANIDINS AND LIGNANS IN TRITICALE BRAN AND STRAW  
F. Hosseinian, **G. Mazza**  
**Pacific Agri-Food Research Centre (Canada)**
- P2. COMPARISON OF SUPERCRITICAL CARBON DIOXIDE AND SOXHLET EXTRACTION OF WAXES, POLYCOSANOLS AND PHYTOSTEROLS FROM FLAX STRAW  
Y. Athukorala, B.D. Oomah, **G. Mazza**  
**Pacific Agri-Food Research Centre (Canada)**
- P3. SUPPRESSIVE EFFECTS OF SUTENT ON HUMAN LEUKEMIC CELLS  
**Yi-Zhen Shi**, Ai-Chun Huang, Yu-Yawn Chen, Chii-Ming Jiang, Yu-Jen Chen, Ming-Chang Wu  
**National Pingtung University of Science and Technology (Taiwan)**
- P4. IMMUNOMODULATORY EFFECTS OF POLYSACCHARIDES ON IMMUNE SYSTEM AGAINST TUMOR CELLS  
**Hung-Hui Chen**, Yi-Lynn Lin, Yu-Yawn Chen, Chii-Ming Jiang, Ming-Chang Wu  
**National Pingtung University of Science and Technology (Taiwan)**
- P5. CITRININ INHIBITS INDUCIBLE NITRIC OXIDE SYNTHASE EXPRESSION VIA ATTENUATION OF SIGNAL TRANSDUCER AND ACTIVATOR OF TRANSCRIPTION A-1 ACTIVATION IN GLOMERULAR MESANGIAL CELLS  
Biing-Hui Liu, Jih-Ying Chi, Yu-Wei Hsiao, Chia-Ching Lin, Shu-Ching Hsu, **Ting-Hui Lin**  
**Chung Shan Medical University (Taiwan)**
- P6. ASSESSMENT OF THE HYPOLIPIDEMIC EFFECTS OF COMBINATORY OR ALTERNATIVE ADMINISTRATION OF VARIOUS HYPOLIPIDEMIC FUNCTIONAL FOODS  
**Chun Kai Chang**, Jimmy Tsai  
**Chung Yuan University (Taiwan)**
- P7. INFLUENCE OF BUCKWHEAT SPROUTS ON YOGHURT PREPARATION  
**Hani Kang**, Jin-Ok Lee, Chul-Jai Kim, Soon-Kyu Lee  
**Sookmyung Women's University (Korea)**
- P8. EFFECT OF SAPONINS ISOLATED FROM THE ROOTS OF *PLATYCODON GRANDIFLORUM* ON OVALBUMIN-INDUCED AIRWAY INFLAMMATION IN MICE  
**Jae Ho Choi**, Hye Gwang Jeong  
**Chosun University (Korea)**

- P9. CAROTENES CONTENT OF MALAYSIAN UNDERUTILISED TROPICAL FRUITS  
**Hock-Eng Khoo**, Amin Ismail, Norhaizan Mohd Esa, Salma Idris  
**Universiti Putra (Malaysia)**
- P10. EFFECTS OF COCOA EXTRACT ON GLUCOMETABOLISM, OXIDATIVE STRESS, AND ANTIOXIDANT ENZYMES IN OBESE-DIABETIC (OB-DB) RATS  
**Abbe Maleyki Mhd Jalil**, Amin Ismail, Mujahir Hamid, Chong Pei Pei, Syed Hasbullah  
**Universiti Putra (Malaysia)**
- P11. ANTI-ANGIOGENIC EFFECTS OF LYCOPENE AND THE MECHANISM OF ITS ACTION  
**Chin-Shiu Huang**, Lan-Chi Chiu, Shih-Chieh Lyu, Miao-Lin Hu  
**(Taiwan)**
- P12. SCREENING FOR ANTI-OBESITY AGENTS  
**Hui-Yun Tsai**, Shiowwen Chen  
**Food Industry Research Development Institute (Taiwan)**
- P13. CHARACTERISTICS OF FUNCTIONAL OILS PREPARED FROM PAPAYA (*CARICA PAPAYA*) SEEDS  
**Wei-Ju Lee**, Nan-Wei Su  
**National Taiwan University (Taiwan)**
- P14. CHARACTERIZATION OF PHENOLIC ACID-ALBUMIN NANOPARTICLES USING LIGHT SCATTERING TECHNIQUE  
**M. Naczka**, A. Harasym, K. Singh, D.G. Marangoni  
**St. Francis Xavier University (Canada)**
- P15. ROLES OF MUSCULAR INSULIN AND ADIPONECTIN SIGNALLING IN THE ANTI-HYPERGLYCEMIC ACTIVITY OF *CORDYCEPS SINENSIS* IN DIABETIC RATS  
Yu-Lin Huang, **Hsi-Chi Lu**, Hui-Chen Lo, Huei-Lan Lai  
**Tunghai University (Taiwan)**
- P16. EVALUATION OF ANTI-ATHEROGENIC POTENTIAL OF JUHUA AND JASMINE  
**Po-Jung Tsai**, Ling Shen, Wen-Huey Wu  
**National Taiwan Normal University (Taiwan)**
- P17. COMBINED EFFECT OF FISH OIL, CAPSAICIN AND CAFFEINE ON VISCERAL FAT AND BLOOD GLUCOSE LEVEL IN KK-A<sup>Y</sup> MICE  
**T. Okumura**, M. Hosokawa, K. Miyashita  
**Hokaido University (Japan)**
- P18. HYDROLYSIS OF MYO-INOSITOL HEXAPHOSPHATE IN BROWN RICE-ADDED BREAD BY ADDING OF CRUDE AND PURIFIED *ASPERGILLUS NIGER* PHYTASE PREPARATIONS DURING BREAD MAKING  
**Akiko Matsuo**, Kenji Sato, Eun Young Park, Yasushi Nakamura, Kozo Ohtsuki  
**Sonoda Women's University (Japan)**

- P19. *IN VIVO* AND *IN VITRO* PROTECTIVE EFFECT OF *ARALIA CONTINENTALIS* ROOT EXTRACT AGAINST *TERT*-BUTYL HYDROPEROXIDE-INDUCED HEPATOTOXICITY IN MICE  
**Yong Pil Hwang, Jae Ho Choi, Hye Gwang Jeong**  
**Chosun University (Korea)**
- P20. *IN VIVO* PROTECTIVE EFFECT OF THE *ARALIA CONTINENTALIS* ROOT EXTRACT AGAINST CARBON TETRACHLORIDE-INDUCED HEPATOTOXICITY IN MICE  
**Yong Pil Hwang, Jae Ho Choi, Hye Gwang Jeong**  
**Chosun University (Korea)**
- P21. ENZYMATIC PREPARATION OF FUNCTIONAL PHOSPHOLIPIDS  
**Y. Yamamoto, M. Hosokawa, K. Miyashita**  
**Hokaido University (Japan)**
- P22. *IN VITRO* POTENTIAL ANTICANCER BIOACTIVITY OF *PSIDIUM GUAJAVA* L. GUAVA BUDDING LEAF EXTRACT  
**Yue-Ting Cheng, Kuan-Chou Chen, Chiung-Chi Peng, Chiu-Lan Hsieh**  
**Hungkuang University (Taiwan)**
- P23. ANTI-INFLAMMATORY AND PHAGOCYtic ACTIVITIES OF THE ETHANOL EXTRACT FROM GRAPEVINE CELL SUSPENSION CULTURE IN MURINE MACROPHAGE CELLS  
**Mei-Chin Mong, Chun-Hung Chiu, Cheng-Kuang Hsu, Chien-Kuo Wang**  
**Asia University (Taiwan)**
- P24. LIMITED NEUTRASE HYDROLYSIS OF ISOLATED SOY PROTEIN ENHANCES ITS ANTI-ADIPOGENIC ACTIVITY DURING 3T3-L1 CELLS DIFFERENTIATION  
**May-June Tsou, Fuh-Juin Kao, Chun-Kai Tseng, Yung-Ling Tsui, Wen-Dee Chiang**  
**Chungchou Institute of Technology (Taiwan)**
- P25. ANTIMICROBIAL ACTIVITY OF PROBIOTIC AGAINST *STREPTOCOCCUS MUTANS* IN VITRO  
**Pei-Pei Lin, You-Miin Hsieh, Cheng-Chih Tsai**  
**Providence University (Taiwan)**
- P26. EFFECT OF COPIGMENTATION ON COLOR AND ANTIOXIDANT ACTIVITY OF ANTHOCYANINS FROM MULBERRY  
**Hsiao Shu-Mien, Pi-Jen Tsai**  
**National Pingtung University of Science and Technology (Taiwan)**
- P27. THE METABOLITES OF QUERCETIN CAUSE G2/M PHASE ARREST IN A HUMAN LUNG CELL LINE A549: AN EX VIVO STUDY  
**Cheng-Hung Chuang, Shu-Lan Yeh, Chiao-Lin Yeh, Wei Chia Tseng, Shu-Ting Chan**  
**Hungkuang University (Taiwan)**
- P28. ANTI-ALLERGIC EFFECTS OF ETHANOLIC EXTRACTS FROM THE DIFFERENT PARTS OF ADLAY IN RAT BASOPHILIC LEUKEMIA CELL  
**Hong-Jhang Chen, Wenchang Chiang**  
**National Taiwan University (Taiwan)**

- P29. ANTIOXIDANT ACTIVITIES AND PHENOLIC COMPOUNDS OF VARIOUS EXTRACTS FROM DEFATTED FLAXSEED FLOUR  
**Chin-Fa Hwang, Ya-Wun Chen, Wen-Dee Chiang**  
**(Taiwan)**
- P30. PROTECTION EFFECTS OF ASTAXANTHIN ON  $\beta$ -AMYLOID (A $\beta$ 25-35)-INDUCED TOXICITY IN PC12 CELLS  
**Jue-Ya Chiou, Yi-Chien Huang, Pei-Tzu Hsu, Pei-Fung Tasi, Chi-Huang Chang, Charng-Cherng Chyau**  
**Hungkuang University (Taiwan)**
- P31. THE MECHANISM OF THE APPLE EXTRACTS INHIBITS EV71 VIRUS REPLICATION  
**Shan-Yu Liao**  
**(Taiwan)**
- P32. ANTIOXIDANT PROPERTIES OF VARIOUS SOLVENT EXTRACTS FROM LYCHEE (*LITCHI CHINENSIS* SONN.) FLOWERS  
**Hsin-Yi Chen, Shih-Chuan Liu, Deng-Jye Yang, Chin-Kun Wang**  
**(Taiwan)**
- P33. ANTI-PROLIFERATIVE ACTIVITIES OF FUROSTANOL AND SPIROSTANOL GLYCOSIDES FROM YAM (*DIOSCOREA PSEUDOJAPONICA* YAMAMOTO) AND DIOSGENIN ON SIX CANCER CELL LINES  
**Chia-Hsi Chen, Ying-Chung Lee, Deng-Jye Yang, Chin-Kun Wang**  
**(Taiwan)**
- P34. STUDIES ON THE ANTI-INFLAMMATORY AND ANTICANCER ACTIVITIES OF *SONCHUS OLERACEUS* L. EXTRACTS  
**Jie Yin, Myeong-Hyeon Wang**  
**Kangwon National University (Korea)**
- P35. EVALUATION OF ANTIOXIDANT PROPERTY OF *KALOPANAX PICTUS* LEAVES FRACTIONS  
**Weicheng Hu, Myeong-Hyeon Wang**  
**Kangwon National University (Korea)**
- P36. ANTIOXIDANT AND ANTIATHEROSCLEROTIC EFFECTS OF SOYMILK FERMENTED WITH *BACILLUS* SP. ISOLATED FROM CHUNGKUKJANG  
**Kyoung-Chun Seo, Jeong-Sook Noh, Eun-Ju Cho, Ji-Sook Han, Yeong-Ok Song**  
**Pusan National University (Korea)**
- P37. EVALUATION OF ANTIOXIDANT ABILITY OF ETHANOLIC EXTRACT FROM DILL (*ANETHUM GRAVEOLENS* L.) FLOWER  
**Chia-Jung Chiang, Yu-Fei Chen, Hsin-Yi Chen, Jau-Tien Lin, Deng-Jye Yang**  
**(Taiwan)**

- P38. THE PHENOLICS STABILITY IN CRANBERRY JUICE AND THE REPAIRMENT OF THE ETHYL ACETATE EXTRACT AND ITS SEPARATED FRACTIONS ON DAMAGED ARPE-19 CELLS IRRADIATED BY BLUE LIGHT  
**I-Hsien Chen**, You-Cheng Shen, Su-Lin Chen, Chin-Kun Wang  
**Chung Shan Medical University (Taiwan)**
- P39. ANTIHYPERTENSIVE EFFECT ON SPONTANEOUSLY HYPERTENSIVE RATS BY TAIWAN *PINUS MORRISONICOLA* HAYATA NEEDLES  
**Ean-Tun Liaw**, Mei-Sian Lee  
**National Pingtung University of Science and Technology (Taiwan)**
- P40. CHARACTERIZATION OF A CRUDE KERATINASE FROM A FEATHER-DEGRADING *BACILLUS THURINGIENSIS* STRAIN  
**Wei-Hsun Lo**, Pei-qi Xia, Cheng-Han Hsieh, Chia-Wei Chang, Hsin-Hsiang Huang, Jane-Yii Wu  
**Da-Yeh University (Taiwan)**
- P41. HEPATIC DETOXIFICATION AND ANTI-TUMOR ACTION OF MEI-GIN  
Chih-Jou Sun, Shi-Chun Yang, **Chia-Yu Chang**, **Yi-Tze Lin**, **Ping-Hsiu Huang**, Chin-Chuan Tsai, **Ming-Chang Wu**  
**National Pingtung University of Science and Technology (Taiwan)**
- P42. INHIBITORY EFFECTS OF FERMENTED SOYBEAN MILK EXTRACT ON CARBOHYDRATE DIGESTIVE ENZYMES AND POSTPRANDIAL HYPERGLYCEMIA  
**Nari Yi**, Eun-Ju Cho, Young-Ok Song, Ji-Sook Han  
**Pusan National University (Korea)**
- P43. INCREASED ANTIMUTAGENIC AND ANTICANCER EFFECTS OF SOYBEAN MILK FERMENTED BY *BACILLUS SUBTILIS* ISOLATED FROM *CHUNGKUKJANG*  
**Hae-Ree Seo**, Boh-Kyung Kim, Geun-Ho Bae, Kyung-Ha Choi, Kun-Young Park  
**Pusan National University (Korea)**
- P44. DIETARY ADMINISTRATION OF CITRUS POLYMETHOXYFLAVONES INHIBIT COLORECTAL ABERRANT CRYPT FOCI (ACF) FORMATION IN AZOXYMETHANE-TREATED MICE  
**Ching-Shu Lai**, Chi-Tang Ho, Ying-Jen Wang, Min-Hsiung Pan  
**National Cheng Kung University (Taiwan)**
- P45. THE IMPROVEMENT ASSESSMENT OF OSTEOPOROSIS AND ANTIOXIDATIVE STATUS BY THE SUPPLEMENTATION OF ISOFLAVONES  
**Hui-Ying Huang**, Shih-Yi Huang, Yu-ling Chang  
**China Medical University (Taiwan)**
- P46. STUDY ON ANTIOXIDATIVE ACTIVITY IN SUGARCANE PEEL EXTRACT  
Ya-Hui Chen, Wang Ling Du, **Pao-Chuan Hsieh**  
**National Pingtung University of Science and Technology (Taiwan)**



- P47. ANTIOXIDANT ACTIVITIES OF THE EXTRACTS OF *RAPHAN SEMEN*  
**Shu-Yi Jin**, Ya-Hung Wang Chia-Min Tsai, Chi-Yue Chang  
**(Taiwan)**
- P48. ANTI-OBESITIC EFFECTS OF BLACK SOYBEAN DOENJANG (KOREAN FERMENTED SOYBEAN PASTE) IN C57BL/6 MICE  
**Ji-Young Kim**, Soon-Sun Bak, Kun-Young Park  
**Pusan National University (Korea)**
- P49. QUALITY CHARACTERISTICS AND ANTICANCER EFFECTS OF *KIMCHI* PREPARED BY SALTED BAECHU CABBAGE WITH DIFFERENT CONDITIONS  
Gwi-Jung Han, Ji-Kang Jung, **Ji-Young Kim**, So-Yeon Park, Kun-Young Park  
**NIAST (Korea)**
- P50. ANTIMUTAGENIC AND ANTICANCER EFFECTS OF *KIMCHI*  
Boh-Kyung Kim, Ah-Reum Son, **Soon-Sun Bak**, Hye-Kyung Chun, Kun-Young Park  
**Pusan National University (Korea)**
- P51. THE ANTI-INFLAMMATORY EFFECT OF ALKALOID EXTRACT AND CONSTITUENTS FROM *NELUMBO NUCIFERA* GAERTN  
**Hong-Yu Lin**, Wenchang Chiang  
**National Taiwan University (Taiwan)**
- P52. ATTENUATION OF SCOPOLAMINE-INDUCED MEMORY IMPAIRMENT IN RATS BY LONGAN EXTRACT  
Yi-Fan Chen, Yi-Yang Lien, **Shyang-Chwen Sheu**  
**National Pingtung University of Science and Technology (Taiwan)**
- P53. DIETARY SUPPLEMENTS ARE ASSOCIATED WITH OVERWEIGHT IN KOREAN TYPE II DIABETES MELLITUS PATIENTS  
Ji-Yun Hwang, **Ji Min Park**, Mi Kyung Kim, Wha Young Kim  
**Ewha Womans University (Korea)**
- P54. THE EFFECT OF *CHLORELLA VULGARIS* ON GLUCOSE METABOLISM IN WISTAR RATS FED HIGH FAT DIET  
Hee Sun Lee, **Eun Ju Lee**, Mi Kyung Kim  
**Ewha Woman's University (Korea)**
- P55. ANTIOXIDANT ACTIVITY ON SELECTED CHINESE HERBALS  
**Ean-Tun Liaw**, Hwei-Zong Tien  
**National Pingtung University of Science and Technology (Taiwan)**
- P56.  $\beta$ -IONONE INDUCES APOPTOSIS IN HUMAN LUNG CANCER CELLS, A-549  
**Seon M. Lee**, Young S. Kim, Jae I. Byeon, Tae W. Oh, Wook J. Jang, Mohmmad Abdur Rakib, So Y. Kim, Jeong O. Kim, Yeong L. Ha  
**Gyeongsang National University (Korea)**

- P57. HYPOGLYCEMIC ACTION OF THE SEMI-PURIFIED FRACTIONS OF LIQUID CULTURE OF *AGARICUS BLAZEI* MURILL IN STREPTOZOTOCIN-INDUCED DIABETIC RATS  
**Tae W. Oh**, Young S. Kim, Seon M. Lee, Jae I. Byeon, Wook J. Jang, Mohmmad Abdur Rakib, So Y. Kim, Jeong O. Kim, Yeong L. Ha  
**Gyeongsang National University (Korea)**
- P58. ANTIOXIDANT ACTIVITY AND PHENOLIC COMPOUND CONTENT OF EXTRACTS FROM FRUITS OF *CANARIUM ALBUM* (LOUR.) RAEUSCH  
Tzu-Hao Liu, **Hui-Yin Chen**  
**Central Taiwan University of Science and Technology (Taiwan)**
- P59. EFFECTS OF *ELEUTHEROCOCCUS SENTICOSUS* ON ANTIOXIDANT STATUS AFTER EXERCISE IN HUMAN  
**Jip Kuo**, I-Shing Cheng, Nancy Su, Ying-Jui Lu, She-Juang Luo, Hsiao-Chi Yang, Ning-Yuean Lee  
**China University of Technology (Taiwan)**
- P60. ANTIOXIDANT AND COGNITIVE IMPROVEMENT IN SENESCENCE-ACCELERATED MINCE FED WITH ANTHOCYANINS-RICH MULBERRY EXTRACTS  
**Ping-Hsiao Shih**, Yin-Ching Chan, Ming-Fu Wang, Gow-Chin Yen  
**National Chung Hsiung University (Taiwan)**
- P61. LIPASE CATALYZED SYNTHESIS LOW CALORIE OIL FROM TUNA OIL AND THEIR ANTI-OBESITY EFFECTS  
**Tae-Kil Eom**, Hee-Guk Byun, Won-Kyo Jung, Sang-Hoon Lee, Se-Kwon Kim  
**Pukyong National University (Korea)**
- P62. ARE THE PLANT AND MAMMALIAN LIGNANS MODULATORS OF ESTROGEN SIGNALLING?  
**Krista A. Power**, Pauliina Dandimopoulou, Sari Mäkelä, Lilian U. Thompson  
**Agriculture and Agri-Food Canada (Canada)**
- P63. EFFECTS OF DIETARY PURPLE RICE ON PLASMA AND LIVER LIPID LEVELS IN RATS  
**Masashi Kawasaki**, Yuko Sato, Megumi Chida, Chisato Hatakeyama  
**Iwate Prefectural University (Japan)**

## NOVEMBER 16

- P64. ANTIOXIDANT PROPERTIES AND ANTIHYPERLIPIDEMIC EFFECT OF UNDERUTILISED *MANGIFERA* FRUITS  
**I. Amin, I. Muhamad, J. Hafizan, S.T. Tan, H.E. Khoo**  
**Universiti Putra (Malaysia)**
- P65. LYCOPENE CONTENT AND LIPOPHILIC ANTIOXIDANT CAPACITY OF PINK GUAVA (*PSIDIUM GUAJAVA*) PUREE INDUSTRIAL WASTES  
**Kin-Weng Kong, Amin Ismail**  
**Universiti Putra (Malaysia)**
- P66. ANTINEOPLASTIC ACTIVITY OF TOCOTRIENOL  
**S. Wada, H. Ichikawa, Y. Naito, H. Nishino, T. Yoshikawa**  
**Kyoto Prefectural University (Japan)**
- P67. FUCOIDAN INDUCED DIFFERENTIATION OF OSTEOBLAST LIKE CELL LINE  
Young-Sook Cho, Jung-Ae Kim, Won-Kyo Jung, **Se-Kwon Kim**  
**Pukyong National University (Korea)**
- P68. *IN VITRO* HIV-1 INHIBITORY ACTIVITY OF SULFATED CHITOLIGOSACCHARIDES OF LOW MOLECULAR WEIGHT  
Murat Artan, Fatih Karadeniz, Moon-Moo Kim, **Se-Kwon Kim**  
**Pukyong National University (Korea)**
- P69. INHIBITORY EFFECT OF CHITO-OLIGOSACCHARIDE ON NEURONAL APOPTOSIS INDUCED BY AMYLOID BETA 25~35 IN RAT PHEOCHROMOCYTOMA(PC-12) CELLS  
Jin-Sook Park, Tae-Kil Eom, Sang-Hoon Lee, **Se-Kwon Kim**  
**Pukyong National University (Korea)**
- P70. INHIBITION iNOS AND COX-2 IN LPS STIMULATED RAW 264.7 CELLS OF CHITIN OLIOSACCHARIDES WITH DIFFERENT MOLECULAR WEIGHTS LEAD TO ANTI-INFLAMMATORY EFFECT  
Dai-Nghiep Ngo, Moon-Moo Kim, Sang-Hoon Lee, **Se-Kwon Kim**  
**Pukyong National University (Korea)**
- P71. ANTITUMOR ACTIVITY OF BEARBERRY-LEAF (*ARCTOSTAPHYLOS UVA-URSI* L. SPRENGEL) PHENOLICS  
**Ryszard Amarowicz, Ronald B. Pegg**  
**Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences (Poland)**
- P72. PURIFICATION OF LYSOZYME BY SUPERPARAMAGNETIC PARTICLES  
**Chia-Cing Chou, Jung-Chi Yang, Wan-Tsz Li, Yun-Hsun Hsiang, Chii-Ming Jiang, Ming-Chang Wu**  
**National Pingtung University of Science and Technology (Taiwan)**

- P73. THE IMMUNOMODULATORY RESPONSE OF THE PHYTOHEMAGGLUTININ ON SWIMMERS WITH REGULAR MODERATE EXERCISE AGAINST U937 LEUKEMIA CELLS  
**Ai-Chun Huang**, Yu-Yawn Chen, Chii-Ming Jiang, Ming-Chang Wu  
**National Pingtung University of Science and Technology (Taiwan)**
- P74. EFFECT OF THE CHINESE MEDICAL HERBS COMPLEX ON CELLULAR IMMUNITY AND ADVERSE EFFECT OF BREAST CANCER PATIENTS  
**Shu-Ru Zhuang**, Su-Lin Chen, Jih-Hsin Tsai, Hong-Sen Lee, Min-Chang Huang, Guang-Tzuu Shane, Cheng-Hua Yang, Yeong-Yu Yan, You-Cheng Shen, Chin-Kun Wang  
**Chung Shan Medical University (Taiwan)**
- P75. PREVENTIVE EFFECT OF EXTRACT OF PIPER BETEL LEAF AND ORANGE PEEL ON ACETAMINOPHEN-INDUCED ACUTE HEPATIC DAMAGE IN RAT MODEL  
**Pei-Fang Wu**, Shu-Huan Wu, Jeng-Dong Hus, Hui-Qing Jiang, Fen-Pi Chou  
**Chung Shan Medical University (Taiwan)**
- P76. FREE RADICAL SCAVENGING ACTIVITIES OF AMINOETHYL CHITOOLOGOSACCHARIDE LEAD TO ANTIOXIDANT EFFECT IN CELL SYSTEM  
**Dai-Nghiep Ngo**, Moon-Moo Kim, Tae-Kil Eom, Na Young Yoon, Pham Thi Anh Hong, Se-Kwon Kim  
**Pukyong National University (Korea)**
- P77. TYROSINASE INHIBITORY ACTIVITY OF PHLOROGLUCINOL DERIVATIVES ISOLATED FROM *ECKLONIA CAVA*  
Na young Yoon, **Tae-Kil Eom**, Se-Kwon Kim  
**Pukyong National University (Korea)**
- P78. IMMUNOMODULATORY EFFECT OF EXTRACTS AQUEOUS EXTRACT ISOLATED FROM *PRUNELLA VULGARIS* IN RAW 264.7 CELLS  
**Eun Hee Han**, Jae Ho Choi, Young Chul Chung, Jong Kwon Seo, Hye Gwang Jeong  
**Chosun University (Korea)**
- P79. HYPOGLYCEMIC EFFECTS OF *POLYGONUM HYPOLEUCUM* EXTRACTS  
**Chi-Hua Chen**, Shiowwen Chen  
**Food Industry Research Development Institute (Taiwan)**
- P80. THE EFFECTS OF SESAMIN AND ISOFLAVONES ON ATHEROSCLEROSIS AND METABOLIC SYNDROME  
Chiu-Hua Kao, Po-Jung Tsai, **Wen-Huey Wu**  
**National Taiwan Normal University (Taiwan)**
- P81. EFFECTS OF SUPERCRITICAL FLUID EXTRACT OF ROSEMARY LEAF AND CARNOSIC ACID IN INHIBITING LIPOPOLYSACCHARIDE-INDUCED INFLAMMATION IN RAW 264.7 MACROPHAGE CELLS  
Jeng-De Su, Chiung-Chi Peng, **Pei-Jing Chen**, Tzu-Ying Sung, Chi-Huang Chang, Charng-Cherng Chyau, Robert Y. Peng  
**Hungkuang University (Taiwan)**

- P82. ANTI-INFLAMMATORY PROPERTIES OF BLACKBERRY POLYPHENOLICS  
Anita Srivastava, Diane K. Hartle, Phillip Greenspan, James L. Hargrove, **Ronald B. Pegg**  
**The University of Georgia (USA)**
- P83. PHENOLIC PROFILES AND ANTIOXIDANT/RADICAL-SCAVENGING CAPACITIES OF RAW AND ROASTED PEANUT (*ARACHIS HYPOGAEA* L.) KERNELS  
**Brian D. Craft**, Ryszard Amarowicz, Ronald B. Pegg  
**The University of Georgia (USA)**
- P84. THE METABOLITES OF QUERCETIN SUPPRESSES THE DNA DAMAGE INDUCED BY BEZO[A]PYRENE ALONE OR IN COMBINATION WITH  $\beta$ -CAROTENE IN A549 CELLS  
**Shu-Lan Yeh**, Shu-Ting Chan, Hsiao-Chun Lin  
**Chung Shan Medical University (Taiwan)**
- P85. EFFECT OF RED WINE EXTRACT OF ONION ON THE PREVENTION OF CARDIOVASCULAR DISEASES BY HUMAN CLINICAL TRAIL  
**Ting-Yun Huang**, Su-Lin Chen, Chin-Kun Wang  
**Chung Shan Medical University (Taiwan)**
- P86. THE EFFECTS OF ROOT BARK EXTRACT OF *MORUS ALBA* ON ACTIVITY OF THE ANTIOXIDANT ENZYMES AND PROTEINS EXPRESSION IN UVB-IRRADIATED HUMAN KERATINOCYTE HACAT CELLS  
Jeng-De Su, Wun-Yuan Lin, **Ya-Chun Hsu**, Ying-Chih Huang, Shiau-Huei Huang, Charng-Cherng Chyau  
**Hungkuang University (Taiwan)**
- P87. L-CYSTEINE REDUCES LOCAL GUT INFLAMMATION AND RESTORES HOMEOSTASIS IN A DEXTRAN SODIUM SULFATE INDUCED PORCINE MODEL OF COLITIS  
C.J. Kim, J. Kovacs-Nolan, C. Yang, T. Archbold, M.Z. Fan, M.A. Hayes, **Y. Mine**  
**University of Guelph (Canada)**
- P88. MOLECULAR MECHANISMS OF THE ANTIANGIOGENIC AND ANTITUMOR EFFECTS OF SAPONINS DERIVED FROM THE ROOTS OF *PLATYCODON GRANDIFLORUM*  
**Kyung Jin Lee**, Soo Jin Hwang, Jae Ho Choi, Hye Gwang Jeong  
**Chosun University (Korea)**
- P89. QUALITY CHARACTERISTICS OF DUKEUM (PAN-FIRED) RAMIE LEAVES POWDER ADDED MUFFIN  
**Lee Yu Jin**, Kim Woon Ju  
**Chungbuk National University (Korea)**
- P90. QUANTIFICATION OF FOOD-DERIVED COLLAGEN PEPTIDES IN HUMAN BLOOD USING LC/MS/MS  
**Satomi Ichikawa**, Masashi Morifuji, Hiroki Ohara, Hitoshi Matsumoto, Yasuo Takeuchi, Takushi Goto  
**Meiji Seika Kisha, LTD (Japan)**

- P91. ANTIOXIDANT ACTIVITY OF PLANT PROTEIN HYDROLYSATES  
**Eun Young Park**, Hiroko Imazu, Yasushi Nakamura, Kenji Sato  
**Kyoto Prefectural University (Japan)**
- P92. ANTIOXIDANT AND ANIDIABETES ACTIVITIES OF ETHANOL EXTRACTS FROM *ASTRAGALUS MEMBRANACEUS* ROOTS  
**Yu Yin**, Myeong-Hyeon Wang  
**Kangwon National University (Korea)**
- P93. PROTECTIVE EFFECTS OF *BACILLUS* SP.-FERMENTED SOYMILK AGAINST RADICAL-INDUCED OXIDATIVE DAMAGE  
**Ji-Myung Choi**, Yeoung-Ok Song, Ji-Sook Han, Eun-Ju Cho  
**Pusan National University (Korea)**
- P94. LITCHI (*LITCHI CHINENSIS* SONN.) FLOWER WATER-EXTRACTS ALLEVIATE HYPERLIPIDEMIA OF HAMSTERS  
Yu Wang, Deng-Jye Yang, Yi-Chen Chen  
**Chung Shan Medical University (Taiwan)**
- P95. ANTIOXIDANT AND ANTI-INFLAMMATORY ACTIVITIES OF THE CRUDE WATER EXTRACTS OF FOUR CHINESE HERBAL FORMULAS  
**Mei-Chin Mong**, Chun-Hung Chiu, Chien-Kuo Han, Min-Min Lee  
**Asia University (Taiwan)**
- P96. ANTIOXIDANT ACTIVITIES AND CAROTENOIDS CONTENT OF ETHANOL EXTRACTS FROM VEGETABLES COMMONLY CONSUMED IN TAIWAN  
Fuh-Juin Kao, May-June Tsou, Yu-Shan Chiu, **Wen-Dee Chiang**  
**Tunghai University (Taiwan)**
- P97. COMPARISON AND EXTENSION OF METHODS FOR CAROTENOIDS DETECTION IN GREEN LEAFY VEGETABLES GROWN IN TAIWAN  
Fuh-Juin Kao, May-June Tsou, Yu-Shan Chiu, **Wen-Dee Chiang**  
**Tunghai University (Taiwan)**
- P98. *IN VITRO* ANTICANCER EFFECT OF WHITE TEA IN HT-29 HUMAN COLON CANCER CELLS  
**Zhao Xin**, Linnan Shao, Soon-Sun Bak, Kun-Young Park  
**Pusan National University (Korea)**
- P99. ANTICANCER EFFECT OF CHITOSAN AND CHITOSAN ADDED KIMCHI IN HT-29 HUMAN COLON CANCER CELLS  
Young-Eun Bahn, Boh-Kyung Kim, Jong-Kil Ha, Soon-Sun Bak, **Kun-Young Park**  
**Pusan National University (Korea)**
- P100. ANTIINFLAMMATORY EFFECTS OF EXTRACTS FROM THE ROOT OF *ARALIA CONTINENTALIS* AND *AGELICA PUBESCENS* F. BISERRATA  
Myeong Sook Cheon, Taesook Yoon, Do Yeon Lee, Goya Choi, Byeong Cheol Moon, Hye-Won Lee, A-Yeong Lee, Byung Kil Choo, **Ho Kyoung Kim**  
**Korea Institute of Oriental Medicine (Korea)**

- P101. IMMUNE PROTECTION WITH THE PROBIOTIC AGAINST *SALMONELLA TYPHIMURIUM* INFECTION IN MICE  
**Cheng-Ying Ho**, Xin-Wen Liang, Yu-Chih Chen, Cheng-Chih Tsai  
**Hungkuang University (Taiwan)**
- P102. ONION CONCENTRATED JUICE SUPPLEMENTATION IMPROVED LIPID AND ANTIOXIDANT METABOLISM IN BORDERLINE HYPERLIPIDEMIC SUBJECTS  
**Gyeong-Im Jeon**, Jung-Mi Kim, Min-Jung Shin, Nam-Sik Chung, Kyung-Hea Lee, Eunju Park  
**Eunju Park Kyungnam University (Korea)**
- P103. SYNERGISTIC EFFECTS OF RUTIN AND VITAMIN E ON VEGF EXPRESSION OF HUMAN PROMYELOCYTIC LEUKEMIA CELL  
**Cheng-Hung Chuang**, Chia-Hua Liu, Miao-Lin Hu  
**Hungkuang University (Taiwan)**
- P104. EFFECTS AND FUNCTIONS OF *GYNOSTEMMA PENTAPHYLLUM* IN THE INHIBITION OF 3T3-L1 PREADIPOCYTE DIFFERENTIATION AND ADIPOGENESIS  
**Woan-Ling Chen**, Pei-Hsiu Hung, Hsi-Chi Lu  
**Changhua Christian Hospital (Taiwan)**
- P105. ANTIOXIDATIVE AND ANTIGENOTOXIC EFFECT OF GARLIC (*ALLIUM SATIVUM* L.) BY PROCESSING METHODS  
Jae-Hee Park, **Gyeong-Im Jeon**, Kyoung-Geun Park, Eunju Park  
**Kyungnam University (Korea)**
- P106. CONJUGATED LINOLEIC ACID SUPPLEMENTATION FOR 8 WEEKS HAS NO EFFECTS ON ANTIOXIDANT SYSTEM HEALTHY OVERWEIGHT/OBESE KOREAN SUBJECTS  
Jung-Mi Kim, **Gyeong-Im Jeon**, Ki-Tae Kim, Hyun-Dong Paik, Eunju Park  
**Kyungnam University (Korea)**
- P107. ANTIMUTAGENICITY OF TRADITIONAL CHINESE MEDICINE LIUWEI-DIEHUANG-WAN  
**Chen Chia-Jer**, Ko Zhi-Yuan, Shen Szu-Chuan, James Swi-Bea Wu  
**I-Shou University (Taiwan)**
- P108. STUDY ON MANUFACTURE OF CHLOROPHYLL MICROENCAPSULATION BY SPRAY DRYING TECHNOLOGY  
Ji-Cheng Ciou, **Yao-Shih Cao**, **Pei-Rong Jhang**, Tzu-Ching Wang, **Ji-Cing Yang**  
**National Pingtung University of Science and Technology (Taiwan)**
- P109. THE INFLUENCE OF LONGAN FLOWER EXTRACT ON GROWTH IN HUMAN COLORECTAL CARCINOMA CELL LINES  
**Chih-Cheng Lin**, Chih-Ping Hsu, Shao-Cheng Wang, Yuan-Chiang Chung, Yi-Ting Shih  
Yuanpei University (**Taiwan**)

- P110. DELPHINIDIN ATTENUATES NEOPLASTIC TRANSFORMATION IN JB6 P+ MOUSE EPIDERMAL CELLS BY BLOCKING RAF/MEK/ERK SIGNALING  
Nam Joo Kang, Ki Won Lee, **Sang Kwon Seo**, Jung Yeon Kwon, Yong-Seok Heo, Zigang Dong, Hyong Joo Lee  
**Seoul National University (Korea)**
- P111. GLUCOSAMINE-6-PHOSPHATE ENHANCES INHIBITION OF ADIPOGENESIS IN 3T3L1 ADIPOCYTES  
**Jung-Ae Kim**, Tae Kil Eom, Chang-Suk Kong, Se-Kwon Kim  
**Pukyong National University (Korea)**
- P112. ANTIOXIDANT EFFECTS OF ISOLATED LACTIC ACID BACTERIA AND PROTECTIVE ROLE IN DNA  
Tse-Chou Cheng, **Shu-Jen Wang**, Min-Hsien Hsu, Jiau Hua Chen, Eric W. Fan  
**Chia-Nan University of Pharmacy and Science (Taiwan)**
- P113. BIOACTIVE PEPTIDES DERIVED FROM SOY PROTEINS  
**Hsiang-Ling Lai**, Shao-Chun Chuang, Yi-Hong Chen, Chu-Chin Chen  
**(Taiwan)**
- P114. OPTIMIZATION OF SUBMERGED CULTURING CONDITION FOR THE PRODUCTION OF MYCELIAL BIOMASS AND EXOPOLYSACCHARIDE BY *PHELLINUS IGNIARIUS*  
Kuo-Yen Lo, Ching-Wen Liu, Wen-Yi Yen, **Lipyng Yan**  
**Tunghai University (Taiwan)**
- P115. BLOCKAGE OF OSTEOARTHRITIS BY ISOLATED PHLOROTANNINS VIA ATTENUATION OF INFLAMMATORY RESPONSES, MMP-1, 3, 13 EXPRESSION & STIMULATION OF DIFFERENTIATION IN HUMAN OSTEOBLASTIC CELLS  
**BoMi Ryu**, Yong Li, Zhong-Ji Qian, Moon-Moo Kim, Se-Kwon Kim  
**Pukyong National University (Korea)**
- P116. UNIBEX, A STANDARDIZED BAMBOO LEAF EXTRACT REDUCES CARDIOVASCULAR RISK FACTORS IN HYPERLIPIDEMIC AND ATHEROSCLEROSIS ANIMAL MODELS  
**Seon-Gil Do**, Dong-Seon Kim, Chung-Seop Kim, Jeong-Bum Nam, Mi-Sun Oh, Jimin Cha, Sung-Sick Woo  
**Unigen Inc. (Korea)**
- P117. FUCOXANTHIN INHIBITS THE PROLIFERATION OF A HEPATOMA CELL LINE WITHOUT AFFECTING A NORMAL LIVER CELL LINE AND EFFECT IS RELATED TO CELL CYCLE ARREST AND TO ENHANCED GAP JUNCTIONAL INTERCELLULAR COMMUNICATION  
**Cheng-Ling Liu**, Yong-Sheng Huang, Miao-Lin Hu  
**National Chung Hsing University (Taiwan)**
- P118. THE ROLE OF GARLIC OIL AS AN INSULIN SECRETOGOGUES IN STZ-DM RATS IS NOT ASSOCIATED WITH ITS ANTI-INFLAMMATORY AND ANTI-OXIDATIVE EFFECTS IN PANCREAS  
Ya-Ping Tan, Tien-Wei Hsu, **Cheng-Tzu Liu**  
**Chung Shan Medical University (Taiwan)**



- P119. PREPARATION AND CHARACTERISTICS OF CHITOSAN HYDROLYSATE-SODIUM TRIPOLYPHOSPHATE-EPIGALLOCATECHIN GALLATE NANOPARTICLES  
**Zin-Hua Yang**, Lipyng Yan, Jin-Hwei Rwan  
**Tunghai University (Taiwan)**
- P120. INHIBITORY EFFECTS OF *CYNANCHUM TAIWANIANUM* ETHANOL EXTRACTS ON NO AND PGE2 PRODUCTION ON NRK-52E CELLS INDUCED BY IL-1 $\beta$   
Hou-I Lee, **Yun-Shan Huang**, Chi-Ching Yang, Shu-Ling Hsieh, Chih-Chung Wu  
**Chang Jung Christian University (Taiwan)**
- P121. VITAMIN C SUPPLEMENT INCREASES TH1/TH2 CYTOKINE SECRETION RATIO, BUT DECREASES EOSINOPHILIC INFILTRATION IN BRONCHOALVEOLAR LAVAGE FLUID OF OVALBUMIN-SENSITIZED AND -CHALLENGED MICE  
Hui-Hsiang Chang, Chin-Shuh Chen, **Jin-Yuarn Lin**  
**National Chung Hsing University (Taiwan)**
- P122. RESVERATROL BIOSYNTHESIS, GLUCONEOGENESIS AND CHANGES OF FATTY ACID PROFILES OF PEANUT KERNELS DURING GERMINATION UNDER THE EFFECT OF ETHANOL  
**Chih-Yu Lo**, Chun-Ru Jhou, Sophia Ferng, Chien Su, Robin Y-Y. Chiou  
**National Chiayi University (Taiwan)**
- P123. PREVENTIVE EFFECTS OF ETHYL ACETATE FRACTION OF ADLAY BRAN ETHANOLIC EXTRACT (ABE-EA) ON DMH-INDUCED PRENEOPLASTIC LESIONS OF COLON IN F344 RATS  
**Cheng Pei Chung**, Wenchang Chiang  
**National Taiwan University (Taiwan)**
- P124. ANTIPROLIFERATION EFFECT AND MECHANISM OF PROSTATE CANCER CELL LINES AS AFFECTED BY ISOFLAVONES FROM SOYBEAN CAKE  
Bai Fu Wang, Jinn Shyan Wang, Jyh Feng Lu, Tsai Hua Kao, **Bing Huei Chen**  
**Fu Jen University (Taiwan)**
- P125. CONTRIBUTION OF *CORCHORUS OLITORIUS* L. PHENOLICS TO THE SUPPRESSION OF INFLAMMATORY RESPONSES  
**Yeong-Yu Yan**, Sun-Lin Chen, Yue-Wen Wang, Chin-Kun Wang  
**Chung Shan Medical University (Taiwan)**
- P126. THE POTENTIAL USE OF AN EXTRACT OF *IRVINGIA GABONENSIS* (IGOB131) IN THE MANAGEMENT OF OBESITY AND METABOLIC SYNDROME IN CAMEROON  
Judith L. Ngondi, Blanche C. Etoundi, Christine B. Nyangono, Rosane S. Matsinkou,  
**Julius E. Oben**  
**University of Yaounde (Cameroon)**

## NOVEMBER 17

- P127. MODULATION OF AKT, JNK, AND P38 ACTIVATION IS INVOLVED IN CITRUS FLAVONOID-MEDIATED CYTOPROTECTION OF PC12 CELLS CHALLENGED BY HYDROGEN PEROXIDE  
**Sam-Long Hwang**, Tzu-Chien Kao, Chi-Neng Hsu, Gow-Chin Yen  
**National Chung Hsiung University (Taiwan)**
- P128. INCREASED CELLULAR DEFENCE AGAINST OXIDATIVE DAMAGE BY *MONASCUS PILOSUS* FERMENTED PRODUCTS GROWN IN GINGER-CONTAINING MEDIUM  
**Chia-Feng Kuo**, Chine-Ru Li, Ming-Hong Ho, Tsu-Shing Wang  
**Shih Chien University (Taiwan)**
- P129. THE INSULIN AND GLUCOSE RESPONSES OF DIABETIC PROTEIN BARS  
**Meng Hsueh Lin**, Chin Ju Chao, Ru Shan Hu, Jenshinn Lin  
**National Pingtung University (Taiwan)**
- P130. LARGE-SCALE PURIFICATION OF ANSERINE FROM HOT WATER EXTRACT OF TUNA FOR FOOD INGREDIENT  
K.Hashimoto, Daiki Kubomura, Yamamura Akihiro, Matuda Hideki, E. Y. Park, Y. Nakamura, **K. Sato**  
**Kyoto Prefectural University (Japan)**
- P131. STUDY ON CHITIN-DEGRADING BACTERIA  
Shu-Chen Chang, Shi-Chun Yang, Yi-Lynn Lin, Chii-Ming Jiang, **Ming-Chang Wu**  
**National Pingtung University of Science and Technology (Taiwan)**
- P132. STUDY ON PURIFICATION AND PHYSICOCHEMICAL CHARACTERIZATION OF LECTIN FROM *AGROCYBE AEGRITA*  
Chia-Hung Hsu, **Wen-Ting Liu**, **Wan-Ling Chen**, **Ai-Chun Huang**, Chii-Ming Jiang, **Ming-Chang Wu**  
**National Pingtung University of Science and Technology (Taiwan)**
- P133. IMPROVEMENT OF PROTEIN DIGESTIBILITY OF SORGHUM BY SOLID FERMENTATION  
**Shau-Tin Kuo**, Wan-Tsz Li, Chia-Yu Chang, Jung-Chi Yang, Chii-Ming Jiang, Ming-Chang Wu  
**National Pingtung University of Science and Technology (Taiwan)**
- P134. S-ADENOSYLHOMOCYSTEINE PROMOTES BV-2 CELL DNA DAMAGE BY INCREASING EXPRESSION OF  $\beta$ -AMYLOID AND PRESENILIN 1 PROTEIN  
**Hung-Chi Lin**, Miao-Lin Hu  
**National Chung Hsing University (Taiwan)**
- P135. EFFECTS OF MICRONIZATION OF FRUIT JUICE ON INTESTINAL MICROFLORA  
**Yuarn-Yee Chang**, Ning-Jung Wu, Shiohwen Chen  
**Food Industry Research Development Institute (Taiwan)**

- P136. EFFECTS OF DIFFERENT PROCESSING METHODS AND STORAGE TIME ON RESISTANT STARCH CONTENT OF HIGH AMYLOSE MAIZE STARCH  
**Chinfu Chou**, Rushan Hu, Chinju Chao, Jenshinn Lin  
**National Pingtung University (Taiwan)**
- P137. EFFECTS OF ADDITION OF SOY EXTRACT ON ISOFLAVONES OF TEXTURED SOY PROTEIN MADE BY A SINGLE-SCREW EXTRUDER  
**Peige Feng**, Zihyun Lin, Jenshinn Lin  
**National Pingtung University (Taiwan)**
- P138.  $\beta$ -CELL REGENERATION IN STZ DM RATS AS AN ALTERNATE ANTIHYPERGLYCEMIC MECHANISM OF *PSIDIUM GUAJAVA* L. EXTRACT  
**Huang Shu-Ming**, Peng Chiung-Hui, Huang Chien-Ning, Hu Miao-Lin, Hsieh Chiu-Lan, Robert Y. Peng  
**Chung Shan Medical University (Taiwan)**
- P139. COMPARISON OF CHEMILUMINESCENCE AND 2,2'-AZINE-BIS (3-ETHYLBENZTHIAZOLINE-6-SULFONIC ACID) (ABTS) ASSAYS IN ANTIOXIDANT CAPABILITIES OF PERILLA SEED EXTRACTS  
**Jeng-De Su**, Yuen-Sung Li, Chiung-Chi Peng, Wen-Hao Liu, Charng-Cherng Chyau, Robert Y. Peng  
**Hungkuang University (Taiwan)**
- P140. EFFECTIVE COMPONENT IN APPLE JUICE FOR ENTEROVIRUS 71 REPLICATION INHIBITION  
**Mei-Ching Yeh**, Elong Lin  
**(Taiwan)**
- P141. THE EFFECT OF FOLATE STATUS ON PLASMA HOMOCYSTEINE CONCENTRATION TO THE RISK OF CORONARY ARTERY DISEASE  
**Ping-Ting Lin**, Yi-Chia Huang, Bor-Jen Lee, Chien-Hsiung Cheng  
**Chung Chou Institute of Technology (Taiwan)**
- P142. INFLUENCE OF DANDELION EXTRACTS ON CELL PROLIFERATION AND GENE EXPRESSION IN ESTROGEN-SENSITIVE BREAST CANCER CELLS  
Shen-Min Huang, Mei-Chin Mong, Yi-Ting Chen, Shiang-Ting Lin, Chun-Hung Chiu  
**Show Chwan Memorial Hospital, Asia University, Hungkuang University (Taiwan)**
- P143. CORRELATIONS OF INHIBITION OF MUSHROOM TYROSINASE ACTIVITY IN VITRO WITH CELLULAR TYROSINASE ACTIVITY AND MELANIN FORMATION IN A2058 MELANOMA CELLS  
Yu-Tuz Chang, Chien-Lin Chen, Zhao-Xiang Chen, **Tuzz-Ying Song**  
**Chungchou Institute of Technology (Taiwan)**

- P144. CHARACTERIZATION OF LYCOPENE-INCORPORATED NANOCAPSULES AND KINETIC STUDIES ON OXIDATION DURING HEATING  
Te-Hsi Liu, **J.T. Chien**  
**Fu Jen University (Taiwan)**
- P145. STUDIES ON PH-CONTROLLED RELEASE KINETICS AND IN VIVO ABSORPTION OF GENISTEIN-INCORPORATING NANOCAPSULES  
Chia-Ju Yu, Yi-Guan Tsai, Y.F. Lu, **J.T. Chien**  
**Fu Jen University (Taiwan)**
- P146. EFFECTS OF ERGOTHIONEINE ON NEURONAL INJURY INDUCED BY CISPLATIN IN VITRO AND IN VIVO AND THE POSSIBLE MECHANISM  
Chien-lin Chen, Yu-Tuz Chang, Ya-Yun Li, Zhai-Hui Wu, Jiunn-Wang Liao, Ming-Shiun Tsai, **Tuzz-Ying Song**  
**Chungchou Institute of Technology (Taiwan)**
- P147. THE RELATION BETWEEN THE CHEMICAL STRUCTURE OF GARLIC SULFUR COMPOUNDS AND THE PI CLASS OF GLUTATHIONE *S*-TRANSFERASE GENE  
**Chia-Wen Tsai**, Yi-Jyun Chen, Hul-Ling Li, Chong-Kuei Lii, Chia-Wen Tsai  
**Institute of Nutrition, China Medical University (Taiwan)**
- P148. CHANGE OF MUMEFURAL IN PROCESSED MEI-GIN  
**Chih-Jou Sun**, Chia-Yu Chang, Shi-Chun Yang, Jung-Jui Chao, Yi-Tze Lin, Ping-hsiu Huang, Chin-Chuan Tsai, Ming-Chang Wu  
**National Pingtung University of Science and Technology (Taiwan)**
- P149. EFFECTS OF SUGAR ADDITION ON THE QUALITY OF PINEAPPLE WINE AND APPLICATIONS OF PINEAPPLE WINE LEES  
**I-Fen Lo**, Wan-Tsz Li, Jung-Chi Yang, Sheng-Yan Wang, Ming-Huei Liao, Ming-Chang Wu  
**National Pingtung University of Science and Technology (Taiwan)**
- P150. EFFECTS OF THE MYCELIUM FROM SUBMERGED CULTURED *ANTRODIA CAMPHORATA* ON THE IMPROVEMENT OF GLUCOSE TOLERANCE AND CARBOHYDRATE METABOLISM IN TYPE 1 DIABETIC RATS  
**Chung-Ying I**, Shi-Chun Yang, Yun-Chieh Pan, Jia-Pin Deng, Szu-Chuan Shen, Ming-Chang Wu  
**National Pingtung University of Science and Technology (Taiwan)**
- P151. PHYSICO-MECHANICAL PROPERTIES OF CHEMICALLY TREATED BIOCELLULOSE MEMBRANE BY *ACETOBACTER XYLINUM*  
Yan-Wen Chen, Sheng-Yang Hsh, Che-Hao Hu, Yueh-Tse Chen, Pei-Yu Chang,  
**Hui-Ping Tein**, Jane-Yii Wu  
**Da-Yeh University (Taiwan)**

- P152. CONVERSION AND DEGLYCOSYLATION OF LIGNAN COMPLEX FROM DEFATTED FLAXSEED FLOUR BY *BACILLUS CEREUS*  
**Chin-Fa Hwang, Wen-Chih Tung**  
**(Taiwan)**
- P153. ANTI-INFLAMMATORY EFFECT OF CALAMONDIN (*CITROFORTUNELLA MITIS*) AND ITS RELATED COMPOUNDS  
Ching-Ju Huang, **Shyi-Neng Lou**  
**National Ilan University (Taiwan)**
- P154. COMPARATIVE CHARACTERIZATION OF ANTHOCYANINS IN EXTRACTS PREPARED FROM ORIGINAL GROUND AND NANO-PARTICLE ROSELLE  
**Thanawoot Parinyapatthanaboot, Chih-Hung Sheu, Praphan Pinsirodom, Pi-Jen Tsai**  
**National Pingtung University of Science and Technology (Taiwan)**
- P155. MONO- AND DI-DEMETHYLATED POLYMETHOXYFLAVONES ARE STRONGER ANTI-INFLAMMATORY NUTRACEUTICALS THAN POLYMETHOXYFLAVONES  
**Yu Wang, Shiming Li, Ching-Shu Lai, Min-Hsiung Pan, Chi-Tang Ho**  
**Rutgers University (USA)**
- P156. DIFFERENTIAL ACTIVITY OF NATURALLY OCCURRING FLAVONOIDS IN ATTENUATING HIGH GLUCOSE-INDUCED EXPRESSION OF PROINFLAMMATORY CYTOKINES IN HUMAN MONOCYTIC THP-1 CELLS  
**Chi-Hao Wu, Cheng Feng Wu, Gow-Chin Yen**  
**National Chung Hsiung University (Taiwan)**
- P157. EFFECT OF METHANOL EXTRACT OF *PRUNUS MUME* NUT ON LDL OXIDATION  
Hsiao-Ju Lee, **You-Cheng Shen, Chin-Kun Wang**  
**Chung Shan Medical University (Taiwan)**
- P158. STUDY OF DIETARY SUPPLEMENT WITH COMPOUND PROTEINS ON THE IMPROVEMENT OF NUTRITION OF HEMODIALYSIS PATIENTS  
**Pei-Chi Chang, Su-Lin Chen, Chin-Kun Wang**  
**(Taiwan)**
- P159. *ANTRODIA CINNAMOMEA* EXTRACT INDUCES APOPTOSIS IN LPS-ACTIVATED RAW264.7 MACROPHAGE CELLS  
**Chih-Hsuan Hish, Wun-Yuan Lin, Charng-Cherng Chyau**  
**Shih Chien University (Taiwan)**
- P160. FINDING A HERB WITH ACETYL-CoA CARBOXYLASE INHIBITORY ACTIVITY AND EVALUATING ITS POTENTIAL IN TREATING METABOLIC SYNDROME  
**Yu-Shen Lin, Mei-Yui Chang, Chi-Hua Chang, Shou-Wen Cheng, Pei-Min Chao**  
**China Medical University (Taiwan)**

- P161. DETECTION OF BETA-1,3/1,6-GLUCANS WITH BINDING ABILITY TO DECTIN-1 IN A COMPETITIVE RECEPTOR BINDING ASSAY  
**Mei-Li Wu, Hui-Ju Hung, Wen-Bin Chung, Tzou-Chi Hwang, Hso-Chi Chaung**  
**National Pingtung University of Science & Technology (Taiwan)**
- P162. IT STUDIED EFFECTS OF SWEET POTATOES BY SUPERHEATED STEAM  
**Jhen-Jhan Wong, Yao-Shih Cao, Pei-Rong Jhang, Ji-Cing Yang, Tzu-Ching Wang**  
**National Pingtung University of Science and Technology (Taiwan)**
- P163. 1-DEOXYNOJIRIMYCIN (1-DNJ) INHIBITS B16-F10 CELLS METASTASIS BY ALTERATION OF CELL SURFACE GLYCOSYLATION  
**Ran-Juh Wang, Chun-Hung Yang, Miao-Lin Hu**  
**Miaoli District Agricultural Research and Extension Station (Taiwan)**
- P164. ESTROGENIC ACTIVITY OF *MOGHANIA MACROPHYLLA* AND THEIR CONSTITUENTS BY A NOVEL DETECTION METHOD USING THE TRANSGENIC PLANT, pER8:GUS  
**Ya-Ting Tsui, Wan-Chun Lai, Ying-Chi Du, Ken-Ichiro Hayashi, Mark D. Curtis, Yang-Chang Wu, Fang-Rong Chang**  
**Kaohsiung Medical University (Taiwan)**
- P165. ISOLATION AND CHARACTERIZATION OF COLLAGEN FROM *OREOCHOMIS NILOTICUS* X *O. AUREUS* SCALE  
**Po-Jung Chen, Chih-Chun Lin, Chen-Yi Lin, Yu-Fu Chen, Jane-Yii Wu**  
**Da-Yeh University (Taiwan)**
- P166. EFFECTS OF SIZE REDUCTION TREATMENT OF CARROT JUICE ON INTESTINAL PHYSIOLOGY  
**H.W. Chang, M.J. Tasi**  
**Food Industry Research and Development Institute (Taiwan)**
- P167. DECREASING THE PURINE CONTENT OF MUSHROOM EXTRACT BY ENZYME AND ION EXCHANGE RESINS  
**F.H. Sheu, M.J. Tasi**  
**Food Industry Research and Development Institute (Taiwan)**
- P168. THE ANTI-METASTATIC EFFICACY AND MECHANISMS OF OXYTHIAMINE IN VITRO  
**Chih-Min Yang, Yi-Zih Liu, Jun-Wang Liao and Miao-Lin Hu**  
**National Chung Hsing University (Taiwan)**
- P169. CHRONIC ORAL TOXICITY EVALUATION OF DIFFERENT TYPES OF CHLORELLA  
**Yin-Ching Chan, Shih-Yi Wang, Huan-Yi Chu, Mei-Due Yang, Ming-Fu Wang**  
**Providence University (Taiwan)**
- P170. CHANGES IN THE PHYSICOCHEMICAL AND ANTIOXIDANT PROPERTIES OF MEI-GIN DURING BOILING AND VACUUM CONCENTRATION METHODS  
**Chang-Wei Hsieh, Emily Chin-Fun Chen, Cheng-Hung Lai, Wen-Ching Ko**  
**Da-Yeh University (Taiwan)**

- P171. PTEROSTILBENE INHIBITS PMA-INDUCED INVASION AND METASTASIS OF HUMAN HEPATOMA CELLS THROUGH INACTIVATING PKC, MAPK AND PI3K/AKT SIGNAL TRANSDUCTION PATHWAY AND REDUCING BINDING ACTIVITIES OF NF- $\kappa$ B AND AP-1  
**Y.S. Chiou, C-T. Ho, M.H. Pan**  
**National Kaohsiung Marine University (Taiwan)**
- P172. OPTIMIZING THE RATIO OF RED PIGMENTS TO CITRININ PRODUCTION BY *MONASCUS PURPUREUS* IN FERMENTATION  
Ya-Hui Chen, Pao-Chuan Hsieh, **Jia-Hsin Guo**  
**National Pingtung University of Science and Technology (Taiwan)**
- P173. EFFECT OF PH ON RHEOLOGICAL CHARACTERISTICS OF POLY- $\gamma$ -GLUTAMATE FERMENTATION BROTH BY *BACILLUS SUBTILIUS* DYU1  
Yu-Ling Chen, Hsin-Yu Hsu, Jung-Wai Wong, Chun-Chun Liu, **You-Cheng Chen, Jane-Yii Wu**  
**Da-Yeh University (Taiwan)**
- P174. NICOTINAMIDE AMELIORATES ALCOHOL-INDUCED LIVER INJURY IN SAMP8  
**Yu-Hsuan Chen, Miao-Lin Hu**  
**Central Taiwan University of Science and Technology (Taiwan)**
- P175. PROTECTION OF BAICALEIN AGAINST OXIDIZED LOW DENSITY LIPOPROTEIN-INDUCED HUMAN UMBILICAL VEIN ENDOTHELIAL DYSFUNCTION  
**Jung-Yi Chen, Wei-Wen Kuo, Tsan Hung Chiu, Hsiu-Chung Ou**  
**(Taiwan)**
- P176. *CORDYCEPS SOBOLIFERA* ATTENUATES UNILATERAL URETERAL OBSTRUCTION-INDUCED RENAL FIBROSIS  
**Li-Ya Lee, Cheng Chih Hsiung, Chin-Chu Chen**  
**(Taiwan)**
- P177. EFFECT OF VANILLYLACETONE ON THE ANTI-INFLAMMATORY IN NORMAL RAT KIDNEY EPITHELIAL CELLS (NRK 52E)  
**Pei-Ying Lin, Keh-Shaw Chen, Chih-Chung Wu, Shu-Ling Hsieh**  
**Fooyin University (Taiwan)**
- P178. THE SCREENING OF POTENTIALLY FUCOSE CONTAINING EPS PRODUCING STRAINS FROM LAB AND EDIBLE MUSHROOMS  
**Wen-Ying Chiang, Tzu-Jun Liu, Gwo-Ren Luo, Jaw-Shiow Chu, Wen-Shen Chu**  
**BCRC/FIRDI (Taiwan)**
- P179. STUDIES ON THE EFFECT OF SUBMERGED FERMENTATION CONDITIONS FOR *POLYPORUS UMBELLATUS* ON THE BIOMASS PRODUCTION AND BIOACTIVITY OF POLYSACCHARIDES  
Wan-Yu Lee, Wei-shuan Li, Lipyng Yan, **Wen-Yi Yen**  
**Tunghai University (Taiwan)**

- P180. CURDLAN FOR VEGETARIAN AND WELL-BEING FOOD  
**Tin-Chen Hsu**, Ms. Li-Hsia Chen, Ms. Shih-Chun Peng, Ms. Yu-Hsin Huang, Ms. Josephine Hsu  
Chien Yuan Food Chemicals Co. Ltd./Chien Cheng Trading Co. Ltd.(Taiwan)
- P181. EFFECTS OF *LATEOLABRAX JAPONICAS* ON WOUND HEALING IN RATS  
**Yan-Jiun Huang**, Ru-Yen Liu  
**Providence University (Taiwan)**
- P182. EFFECT OF SINGLE AND MIXED STRAINS OF LACTIC ACID STARTERS ON MICROBIAL QUALITY, CHEMICAL COMPOSITION AND PHYSICAL PROPERTIES OF GOATMILK YOGURT  
Ju-Yin Shiao, Jin-Hwei Rwan, Chi-Fa Chow, **Lipyng Yan**  
**Tunghai University (Taiwan)**
- P183. EFFECT OF ADLAY (*COIX LACHRYMA-JOBI L. VAR. MA-YUEN STAPF*) HULL ON LIPOPOLYSACCHARIDE (LPS)-INDUCED INFLAMMATION IN RAW 264.7 MACROPHAGES  
**Din-Wen Huang**, Wenchang Chiang  
**National Taiwan University (Taiwan)**
- P184. THE EFFECT OF CHLORELLA INTAKE ON CADMIUM DETOXIFICATION IN RATS STRESSED WITH DIETARY CADMIUM  
You Jin Kim, **Ji Min Park**, Mi Kyung Kim  
**Ewha Womans University (Korea)**
- P185. REGULATION OF CELLULAR LEVELS OF P21 AND P27/KIP THROUGH MODULATION OF HIF SIGNALLING PATHWAY BY OXIDATIVE STRESS AND ANTIOXIDANT  
**Jong-Sang Kim**, Lesely Quintos, In Ae Lee, Hak Ryul Kim, Jung Han Yoon Park  
**Kyungpook National University (Korea)**
- P186. ANTIOXIDANT EFFECTS OF ETHYL ACETATE-SOLUBLE FRACTION OF *CHRYSANTHEMUM CORONARIUM*  
**Jong-Sang Kim**, Ji-Yeon Seo, Ji-Sun Lim, Soon Sung Lim, Jung Han Yoon Park, ChoongHwan Lee, Kong AT, Jong-Sang Kim  
**Kyungpook National University (Korea)**
- P187. IDENTIFICATION OF ISOALANTOLACTONE FROM *INULA HELENIUM* AS A INDUCER OF PHASE 2 DETOXIFICATION ENZYME  
**Jong-Sang Kim**, Ji-Yeon Seo, Ji-Sun Lim, Hyo-Jung Kim, In Ae Lee  
Kyungpook National University (Korea)
- P188. A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, PARALLEL COMPARISON STUDY TO EVALUATE THE EFFICACY OF ORAL ADMINISTRATION OF NATTOKINASE TAKEN BY DYSLIPIDEMIA PATIENTS  
**Nae-Cherng Yang**, Chien-Wen Chou  
Chung Chou Institute of Technology (Taiwan)





## International Society for Nutraceutical and Functional Foods

### Exhibitors at ISNFF 2008 Conference and Exhibition

#### Booth #

- |     |   |
|-----|---|
| 1   | U.S. Dairy Export Council                                   |
| 2   | Standard Foods Corporation                                  |
| 3/4 | JC & Associates Communications, Inc.                        |
| 5   | Cerebos International Health Ltd. Taiwan Branch             |
| 6   | Uni-President Enterprises Corporation                       |
| 7   | Sentosa Co., Ltd.   |
| 8   | Wei Chuan Foods Corporation                                 |
| 9   | Elsevier  |
| 10  | E Kitchen Business Corporation                              |
| 11  | E Hong Instruments Co., Ltd.                                |
| 12  | Pai Chia Chen Brewery and Foods Co., Ltd.                   |
| 13  | Doublecrane Co., Ltd.                                       |
| 14  | International Society for Nutraceuticals & Functional Foods |

### Sponsors of ISNFF 2008 Conference and Exhibition

International Union of Food Science and Technology (IUFoST)  
InterHealth Nutraceuticals, USA  
Nutralite Health Institute, USA  
KGK Synergize, Inc., Canada  
Amino Up Chemical Company Ltd., Japan  
Ocean Nutrition, Canada  
Tsern Shinn Enterprise Co., Ltd.  
Extragene, Inc.  
Hong-Yu Instrument Co., Ltd.  
Eugene Chen Co., Ltd.  
Kim Forest Enterprise Co., Ltd.  
Medigreen Biotechnology Corp.  
Tseng Hsiang Life Science Ltd.  
Sunway Scientific Corporation  
Biolife Technology Co., Ltd.  
Nestle Nutrition Taiwan Ltd.  
Abbott Laboratories Services Corp. Taiwan Branch  
United H&C Enterprise Co., Ltd.  
Creative Media Products Ltd.  
Great Tide Instrument Co., Ltd.