### PS-01-a-293 Development of Results-Based Monitoring and Evaluation Framework and Tool for the Capacity Building Program of Nutrition Workers in the Philippines

Aileen R. de Juras, Ma. Theresa Talavera, Angelina Bustos, Nancy Tandang, Wilfredo Carada, Mayo Grace Amit, Nelson Jose Vincent Querijero
University of the Philippines Los Banos, Philippines

### PS-01-a-294 Associations of Household Income and Education with Eating Behaviors in Japanese Adults: A Cross-sectional Analysis

Saki Nakamura<sup>1</sup>, Takayo Inayama<sup>1</sup>, Kikuko Hata<sup>1</sup>, Munehiro Matsushita<sup>2,3</sup>, Masaki Takahashi<sup>2</sup>, Kazuhiro Harada<sup>4</sup>, Takashi Arao<sup>2</sup>

<sup>1</sup>Tokyo Metropolitan University, Japan, <sup>2</sup>Waseda University, Japan, <sup>3</sup>National Institute of Health and Nutrition, Japan, <sup>4</sup>National Center for Geriatrics and Gerontology, Japan

#### PS-01-a-295 Fasting glucose as a useful predictor for cerebrovascular risk and its complication in nondiabetes: association with oxidative stress and inflammation

Ga Yoon Na<sup>1</sup>, Oh Yoen Kim<sup>1</sup>, So Ra Yoon<sup>1</sup>, Jae Hyang Lee<sup>1</sup>, Jae-Kwan Cha<sup>2</sup> Dong-A Univ., Korea, <sup>2</sup>Dong-A University Hospital, Korea

### PS-01-a-296 Lower proportion of docosahexaeoic acid in serum phospholipids is associated with increased cardiovascular risk: inverse relationship with arterial stiffness

Oh Yoen Kim<sup>1</sup>, Mi-Hyang Lee<sup>1,2</sup>, So Ra Yoon<sup>1</sup>, Young-Guk Ko<sup>3</sup>, Jong Ho Lee<sup>2</sup> <sup>1</sup>Dong-A Univ., Korea, <sup>2</sup>Yonsei Univ., Korea, <sup>3</sup>Severance Hospital, Korea

#### PS-01-a-297 Antrodia cinnamomea Alleviates Cisplatin-Induced Hepatotoxicity and Enhances Chemo-Sensitivity of Line-1 Lung Carcinoma Cells in Xenografted BALB/cByJ Mice

Yi-Han Chiu<sup>1</sup>, Tse-Hung Huang<sup>2,3</sup>, Yi-Lin Chan<sup>4</sup>, Chang-Jer Wu<sup>1</sup>

<sup>1</sup>National Taiwan Ocean University, Taiwan, <sup>2</sup>Chang Gung University, Taiwan, <sup>3</sup>Chang Gung Memorial Hospital, Taiwan, <sup>4</sup>Chinese Culture University, Taiwan

#### **Poster Session 02**

### PM Nutritional Biochemistry 2

### PS-01-p-001 Three-time meal feeding approach for the mechanism of decreasing effect on energy intake of beet dietary fiber in rats

Satoru Doi, Koichi Sejima, Yuka Kohara, Fumiya Kakihara, Taro Kishida *Ehime University, Japan* 

### PS-01-p-002 Colonic hydrogen derived from fructooligosaccharides reduces secretion of adipocytokines in obese rats and mice

Tanabe Hiroki, Nonoka Matsumura, Tatsuro Yamamoto, Naomichi Nishimura Nayoro City University, Japan

### PS-01-p-003 Noncompetitive inhibition of D-Tagatose and D-Allose on small intestinal sucrase activity in the rats

Junko Kizu, Haruka Ozaki, Kumiko Okabe, Aoi Hosono, Kazuhiko Yamada Kagawa Nutrition University, Japan

#### PS-01-p-004 Effects of Gelidium amansii on lipids metabolism in diabetic rats

Tsung-Han Yang, Hshuan-Chen Liu, Chun-Ju Chang, Meng-Tsan Chiang National Taiwan Ocean University, Taiwan

#### PS-01-p-005 Enhanced high sucrose diet preference in Elovl6 deficient mice

Mariko Toh¹, Noriko Suzuki-kemuriyama², Yuki Fushimi², Eriko Yoshida², Hiroshi Ohno², Junko Kato², Matsuzaka Takashi², Nobuhiro Yamada², Kaoruko lida¹, Hitoshi Shimano² ¹Ochanomizu University, Japan, ²University of Tsukuba, Japan

# PS-01-p-006 Influence of a fatty acid desaturase gene polymorphism on blood long-chain polyunsaturated fatty acids: comparison between young and elderly women

Sayaka Horiguchi<sup>1</sup>, Kazuhiro Nakayama<sup>2</sup>, Sadahiko Iwamoto<sup>2</sup>, Akiko Ishijima<sup>3</sup>, Takayuki Minezaki<sup>3</sup>, Mamiko Baba<sup>3</sup>, Yoshiko Kontai<sup>4</sup>, Chika Horikawa<sup>5</sup>, Hiroshi Kawashima<sup>5</sup>, Hiroshi Shibata<sup>5</sup>, Yasuo Kagawa<sup>1</sup>, Terue Kawabata<sup>1</sup>

<sup>1</sup>Kagawa Nutrition University, Japan, <sup>2</sup>Jichi Medical University, Japan, <sup>3</sup>Mamie Hospital, Japan, <sup>4</sup>Niigata Prefecture University, Japan, <sup>5</sup>Suntory Wellness Ltd., Japan



# PS-01-p-007 Induction of oxidative stress-induced growth inhibitor by docosahexaenoic acid is mediated through the PI3K/Akt/Nrf2 pathway in MCF-7 breast cancer cells

Chia-Han Tsai<sup>1</sup>, Ya-Li Huang<sup>1,2</sup>, Chien-Chun Li<sup>1,3</sup>

<sup>1</sup>Chung Shan Medical University, Taiwan, <sup>2</sup>Kaohsiung Municipal Kai-Syuan Psychiatric Hospital, Taiwan, <sup>3</sup>Chung Shan Medical University Hospital, Taiwan

## PS-01-p-008 Different Effects of Docosahexaenoic Acid and Eicosapentaenoic acid on SKOV3 Human Ovarian Cancer Cells Migration and Invasion

Chen-Yu Lin<sup>1</sup>, Chien-Chun Li<sup>1,2</sup>, Te-Chung Liu<sup>1</sup>

<sup>1</sup>Chung Shan Medical University, Taiwan, <sup>2</sup>Chung Shan Medical University Hospital, Taiwan

#### PS-01-p-009 Effect of intranasal GALP on obesity and hepatic lipid metabolism in obese mice

Satoshi Hirako<sup>1</sup>, Haruaki Kageyama<sup>2</sup>, Fumiko Takenoya<sup>3</sup>, Nobuhiro Wada<sup>1</sup>, Mai Okabe<sup>4</sup>, Seiji Shioda<sup>1</sup> 
<sup>1</sup>Showa University School of Medicine, Japan, <sup>2</sup>Kiryu University, Japan, <sup>3</sup>Hoshi University School of Pharmacy, Japan, <sup>4</sup>Tokyo Shokuryo Dietitian Academy, Japan

### PS-01-p-010 Protective effects of different dietary proportion of fish oil on hepatic injury in chronic ethanol-fed rats

Suh-Ching Yang, Ya-Ling Chen, Hsiang-Chi Peng, Yu-An Lu, Hsiao-Yun Chang, Hsiao Yun Wang, Yu-Ju Su

Taipei Medical University, Taiwan

#### PS-01-p-011 Functional characterization of siphonaxanthin on lipid metabolism

Jiawen Zheng, Zhuosi Li, Yuki Manabe, Tatsuya Sugawara *Kyoto University, Japan* 

### PS-01-p-012 Major Royal jelly Protein 1 (MRJP1) is a novel hypocholesterolemic protein derived from royal jelly

Saori Asai¹, Yuri Kashima¹, Satoshi Kanematsu¹, Mio Kusada², Suzuyo Watanabe¹, Takuji Kawashima¹, Tadashi Nakamura¹, Masaya Shimada², Tsuyoshi Goto², Satoshi Nagaoka² ¹Akitaya Honten Co., Ltd., Japan, ²Gifu University, Japan

### PS-01-p-013 A novel hypocholesterolemic pentapeptide, lactostatin, inhibits cholesterol absorption via the suppression of ABCA1 gene expression in Caco-2 cells

Yuji Sakai, Ayumi Komuro, Tatsuki Yamamoto, Masaya Shimada, Satoshi Nagaoka Gifu University, Japan

# PS-01-p-014 Ingestion of gac (*Momordica cochinchinensis*) improves lipid metabolism by promoting differentiation to mature adipocytes

Mitsuru Satsukawa<sup>1</sup>, Tetsuhiro Kawamoto<sup>1</sup>, Byung-Yoon Cha<sup>2</sup>, Je-Tae Woo<sup>2</sup>, Natsumi Yamanaka<sup>2</sup>, Noriko Ogawa<sup>2</sup>

<sup>1</sup>Tokai Pickling Co., Ltd., Japan, <sup>2</sup>Chubu University, Japan

### PS-01-p-015 Effects of Alpha-Linolenic Acid in Green Nut Oils on Eicosapentaenoic Acid and Docosahexaenoic Acid synthesis in various organs

Michiko Oiwa, Emiko Takeyama, Masako Fukushima, Asami Shirakawa, Mizuki Naito, Keiko Mitsuki, Saki Yajima

Showa Woman's University, Japan

### PS-01-p-016 Effects of Dietary Plant-origin Glucosylceramide on Bowel Inflammation in DSS-treated mice

Mikiio Kinoshita<sup>1</sup>, Katsuhito Arai<sup>1</sup>, Yu Mizobuchi<sup>1</sup>, Shinji Yamashita<sup>1</sup>, Kazuhiko Aida<sup>2</sup>, Masao Ohnishi<sup>1</sup> Obihiro University, Japan, <sup>2</sup>Nippon Flour Mills Co. Ltd., Japan

## PS-01-p-017 The Preventive Effects of Astaxanthin and Various Dietary n-6/n-3 Fatty Acids on Induced Oral Carcinoma

An Liang<sup>1,3</sup>, Shih-Yi Huang<sup>1,3</sup>, Hsiu-Chuan Lee<sup>1,2,3</sup>

<sup>1</sup>School of Nutrition and Health Sciences, <sup>2</sup>Program for Translation Medicine, <sup>3</sup>Taipei Medical University, Taiwan

# PS-01-p-018 The Preventive Effect of N-3 Polyunsaturated Fatty Acids on Cognitive Decline and Depressive Behavior in Aged Metabolic Syndrome Rats

Yu-Ru Guo<sup>1</sup>, Shih-Yi Huang<sup>1</sup>, Hsiu-Chuan Lee<sup>1</sup> Taipei Medical University, Taiwan

### PS-01-p-019 Gamma-Linolenic Acid Inhibits Lewis Lung Carcinoma Conditioned Medium-Induced Inflammatoin and Protein degradation in C2C12 Myotubes

Pei-Yin Chen, Kai-Li Liu, Whei-Ling Chiang Chung Shan Medical University, Taiwan

### **Program**

### PS-01-p-020 Effect of medium-chain triglycerides on cancer cachexia induced muscle wasting Yu-Hui Shih, Kai-Li Liu, Te-Chung Liu

Chung Shan Medical University, Taiwan

#### PS-01-p-021 Hypocholesterolemic Effects of Lactic Acid-Fermented Soymilk on Rats Fed a High **Cholesterol Diet**

Maki Kobayashi<sup>1</sup>, Shintaro Egusa<sup>3</sup>, Mitsuru Fukuda<sup>2</sup>

<sup>1</sup>Hyogo University, Japan, <sup>2</sup>Mukogawa Women's University, Japan, <sup>3</sup>MARUSAN-AI Co., Ltd., Japan

#### PS-01-p-022 Interrelated effects of fish oil and alpha-lipoic acid on hepatic fatty acid synthesis and parameters for oxidative stress in rats

Takashi Ide, Mizuki Jimbo, Ayaka Itakura, Saori Okano, Mayuko Kameiwa, Miki Kawaziri, Arisa Sitara, Nozomi Takahashi

Jumonji University, Japan

#### PS-01-p-023 Comparative LDL-Cholesterol-Lowering Effects of Tea Seed Oil and Olive Oil in Hamsters

Nuchanart Suealek<sup>1</sup>, Wallace Yokoyama<sup>2</sup>, Panadda Rojpibulstit<sup>1</sup>, Hyunsook Kim<sup>3</sup>, Robert Hackman<sup>4</sup> <sup>1</sup>Thammasat University, Thailand, <sup>2</sup>U.S. Department of Agriculture, USA, <sup>3</sup>Konkuk University, Korea, <sup>4</sup>University of California, USA

#### Histopathological Changes Of The Hamster Internal Organs After Ingestion High-Grape PS-01-p-024 Seed Oil Diet

Panadda Rojpibulstit<sup>1</sup>, Nuchanart Suealek<sup>1</sup>, Wallace Yokoyama<sup>2</sup>, Hyunsook Kim<sup>3</sup>, Robert Hackman<sup>4</sup> <sup>1</sup>Thammasat University, Thailand, <sup>2</sup>U.S. Department of Agriculture, USA, <sup>3</sup>Konkuk University, Korea, <sup>4</sup>University of California, USA

### PS-01-p-025 Effects of kombu powder feeding on glucose and lipid metabolism of rats

Hitomi Fukuda, Mika Kouno, Michiko Katsukawa, Sonomi Okuno, Nobuko Iritani Tezukayama Gakuin University, Japan

#### PS-01-p-026 Intestinal digestion of ceramide 2-aminoethylphosphonate, a marine sphingolipid from squid

Nami Tomonaga, Dan Qi, Yuki Manabe, Tatsuya Sugawara Kyoto University, Japan

#### PS-01-p-027 Effects of eicosapentaenoic acid on anxiety-like behavior in rat

Yasuyo Oshima, Takeshi Harada, Shun Endo, Asako Takenaka Meiji University, Japan

#### PS-01-p-028 The effect of fatty acid composition of the Japanese food on the visceral fat accumulation Yu Sakamoto, Tsuyoshi Tsuduki

Tohoku University, Japan

#### Effect of Monascus-Purpureus supplementation on decrease LDL and cholesterol level in PS-01-p-029 Hyperlipidemia:Double blind, placebo control study

Sheng-Fu Liu, Ying-Ruei Wang, Chin-Kun Wang Chung Shan Medical University, Taiwan

#### PS-01-p-030 Comparison of catabolic rates of <sup>13</sup>C-labeled palmitic acid bound to alpha and beta positions of triacylglycerol using expired CO,

Naohiro Gotoh<sup>1</sup>, Fumiaki Beppu<sup>1</sup>, Kaoru Konno<sup>1</sup>, Takashi Kawamatsu<sup>1</sup>, Toshiharu Nagai<sup>2</sup>, Kazuaki Yoshinaga², Hoyo Mizobe², Koichi Kojima², Hiroyuki Watanabe³

<sup>1</sup>Tokyo University of Marine Science and Technology, Japan, <sup>2</sup>Tsukishima Foods Industry Co. Ltd., Japan, <sup>3</sup>University of Kochi, Japan

#### Acute Effects of walking exercise on postprandial carbohydrate and lipoprotein metabolism PS-01-p-031 following cookie ingestion in Japanese female students

Sayuki Hashimoto<sup>1</sup>, Erika Mizutani<sup>2</sup>, Akihiro Yoshida<sup>3</sup>, Michitaka Naito<sup>4</sup>

<sup>1</sup>Kinjo Gakuin University, Japan, <sup>2</sup>College of Nagoya Bunri University, Japan, <sup>3</sup>Nakatsugawa Municipal General Hospital, Japan, <sup>4</sup>Sugiyama Jogakuen University, Japan

#### PS-01-p-032 Association between Physical Fitness and Lipid Profil of Overweight Students

Nazhif Gifari, Hardinsyah Ridwan Bogor Agricultural University, Indonesia

#### PS-01-p-033 Effects of dietary intake of butyrate on GLUT-4 content in rat skeletal muscle

Yudai Nonaka<sup>1</sup>, Kazuhiko Higashida<sup>2</sup>, Michiyo Kimura<sup>3</sup>, Shin Terada<sup>1</sup>

<sup>1</sup>The University of Tokyo, Japan, <sup>2</sup>Waseda University, Japan, <sup>3</sup>Takasaki University of Health and Welfare, Japan



### PS-01-p-034 Effects of D-allulose, a C3 epimer of D-fructose, on lipid metabolism in isolated rat hepatocytes

Akane Kanasaki¹, Taishi Suzuki¹, Norihiro Torisu¹, Yohei Noguchi¹, Yasuo Nagata¹.², Shizuka Tamaru¹, Kazunari Tanaka¹

<sup>1</sup>University of Nagasaki, Siebold, Japan, <sup>2</sup>Nagasaki University, Japan

## PS-01-p-035 The relationship between body composition and intramuscular lipids in young healthy female

Chisato Nakada<sup>1</sup>, Takuya Osawa<sup>2</sup>, Yoshikazu Takanami<sup>3</sup>, Sakina Yoshida<sup>3</sup>, Yukari Kawai<sup>4</sup>

<sup>1</sup>Otsuma Women's University, Japan, <sup>2</sup>Japan Institute of Sports Sciences, Japan, <sup>3</sup>Otsuma Women's University, Japan, <sup>4</sup>Louis Pasteur Center for Medical Research, Japan

### PS-01-p-036 Analysis of genomic region controlling the development of high-fat diet-induced fatty liver using congenic mice

Miyako Suzuki, Misato Kobayashi, Tamio Ohno, Junko Tsujimura, Hiroaki Oda, Atsushi Murai, Fumihiko Horio

Nagoya University, Japan

### PS-01-p-037 Detection of glycosylceramide species of koji *Aspergillus oryzae* by ESI-MS/MS and fragment ion analysis

Hiroshi Hamajima, Susumu Mitsutake, Koji Nagao, Hiroshi Kitagaki Saga University, Japan

### PS-01-p-038 Serum fatty acid composition of neonates, infants and young people measured by gas chromatography mass spectrometry

Fumie Nishijima<sup>1</sup>, Eiko Hidaka<sup>1</sup>, Noriko Kubota<sup>1</sup>, Takako Ono<sup>1</sup>, Tomohiko Nakamura<sup>1</sup>, Takayuki Honda<sup>2</sup>, Minoru Hongo<sup>2</sup>, Hiroya Hidaka<sup>2</sup>

<sup>1</sup>Nagano Children's Hospital, Japan, <sup>2</sup>Shinshu University, Japan

### PS-01-p-039 Direct separation of the diastereomers of phosphatidylcholine hydroperoxide bearing 13-hydroperoxy-9Z,11E-octadecadienoic acid using chiral stationary phase HPLC

Junya Ito<sup>1</sup>, Kiyotaka Nakagawa<sup>1</sup>, Shunji Kato<sup>1</sup>, Toshiharu Nagai<sup>2</sup>, Teruo Miyazawa<sup>1</sup> Tohoku University, Japan, <sup>2</sup>Tsukishima Foods Industry Company, Japan

# PS-01-p-040 Analysis of human serum sphingomyelin molecular species using MALDI-TOF mass spectrometry

Atsushi Hori<sup>1</sup>, Mine Yamashita<sup>2</sup>, Shuhei Kidoguchi<sup>3</sup>, Minoru Hongo<sup>1</sup>, Takayuki Honda<sup>1</sup>, Hiroya Hidaka<sup>1</sup> Shinshu University, Japan, <sup>2</sup>University of Toyama, Japan, <sup>3</sup>University of Fukui, Japan

## PS-01-p-041 Dioscorea japonica extract suppresses cyclooxygenase-2 and microsomal prostaglandin E synthase-1 in lung carcinoma A549 cells and macrophage-like RAW264 cells

Keisuke Toda<sup>1</sup>, Izumi Tsukayama<sup>1</sup>, Takuto Mega<sup>1</sup>, Mitsuki Tanaka<sup>1</sup>, Yasunori Takeda<sup>1</sup>, Toshiya Arakawa<sup>2</sup>, Yuki Kawakami<sup>1</sup>, Masumi Kimoto<sup>1</sup>, Yoshitaka Takahashi<sup>1</sup>, Toshiko Suzuki-Yamamoto<sup>1</sup>

1 Okayama Prefectural University, Japan, 2 Health Science University of Hokkaido, Japan

### PS-01-p-042 The influence of n-3 fatty acid on maternal behavior and brain monoamine content in the perinatal period

Akiko Harauma, Takayuki Sagisaka, Taku Horii, Shunichi Nakamura, Natsuko Wakinaka, Yoshitake Watanabe, Toru Moriguchi

Azabu University, Japan

### PS-01-p-043 The effects of arachidonic acid and/or docosahexaenoic acid on the brain development using artificial rearing of delta-6-desaturase knockout mice

Erisa Hatanaka<sup>1</sup>, Hidemi Yasuda<sup>1</sup>, Akiko Harauma<sup>1</sup>, Junnosuke Watanabe<sup>1</sup>, Yoshiko Konishi<sup>1</sup>, Manabu Nakamura<sup>2</sup>, Norman Salem<sup>3</sup>, Toru Moriguchi<sup>1</sup>

<sup>1</sup>Azabu University, Japan, <sup>2</sup>University of Illinois, USA, <sup>3</sup>DSM Nutritional Products

### PS-01-p-044 LC-MS/MS analysis of choline/ethanolamine plasmalogens via promotion of alkali metals adduct formation

Yurika Otoki, Shunji Kato, Kiyotaka Nakagawa, Teruo Miyazawa *Tohoku University, Japan* 

#### PS-01-p-045 The potential of bitter melon in prevention of non-alcoholic fatty liver disease

Mei-Ling Chang<sup>1</sup>, Zhong-Hao Chien<sup>2</sup>, Shao-Chun Lu<sup>2</sup>

<sup>1</sup>Shih Chien University, Taiwan, <sup>2</sup>National Taiwan University, Taiwan

### **Program**

# PS-01-p-046 Effect of mixed tea made with unripe *Citrus Unshiu* and third-crop green tea leaves on hepatic lipid accumulation in rats

Shizuka Tamaru¹, Mirei Iha¹, Sayaka Shimamoto¹, Hisayuki Nakayama¹.², Sadayuki Aramaki², Yuji Miyata², Takashi Tanaka³, Toshiro Matsui⁴, Yasuo Nagata¹.³, Kazunari Tanaka¹

<sup>1</sup>University of Nagasaki, Siebold, Japan, <sup>2</sup>Nagasaki Agricultural and Forestry Technical Development Center, Japan, <sup>3</sup>Nagasaki University, Japan, <sup>4</sup>Kyushu University, Japan

### PS-01-p-047 Juar tea consumption increases endothelium-bound extracellular superoxide dismutase levels in men with metabolic syndrome : link with LDL oxidizability

Harumi Kondo<sup>1</sup>, Makoto Ayaori<sup>1</sup>, Yoshimi Kishimoto<sup>2</sup>, Tetsuo Adachi<sup>3</sup>, Kazuo Kondo<sup>2</sup>, Katsunori Ikewaki<sup>3</sup> <sup>1</sup>National Defense Medical College, Japan, <sup>2</sup>Ochanomizu University, Japan, <sup>3</sup>Gifu Pharmaceutical University, Japan

#### PS-01-p-048 Inhibitory effect of nutmeg extract on 5-lipoxygenase activity

Yuki Kawakami, Yoshiko Mori, Kensuke Okamoto, Shuji Okochi, Toshiko Suzuki-Yamamoto, Masumi Kimoto, Hiromi Yamashita, Hideyuki Ito, Yoshitaka Takahashi
Okayama Prefectural University, Japan

#### PS-01-p-049 Effects of fish oil on the oxidative stress in obese Zucker rats

Yasue Hosoyamada, Masako Yamada

Chiba Prefectural University of Health Sciences, Japan

# PS-01-p-050 Theoretical Interaction Analysis of Free Fatty Acid Receptor, GPR40 and GPR120 with omega-3 and omega-6 FFAs based on FMO Method

Yuka Nakano¹, Erika Ishitsubo¹, Kohsuke Hayamizu², Li Han², Tomoko Tsuji², Yasuo Watanabe³, Shizuo Yamada⁴, Hiroaki Tokiwa¹

¹Rikkyo University, Japan, ²Nippon Suisan Kaisha, Ltd., Japan, ³Yokohama College of Pharmacy, Japan, ⁴Univ. Shizuoka, Japan

#### PS-01-p-051 Effect of dietary astaxanthin on UVA-induced skin photoaging in hairless mice

Toshiyuki Komatsu¹, Suguru Sasaki¹, Yuki Manabe¹, Hitomi Sato², Takashi Hirata³, Tatsuya Sugawara¹ ¹Kyoto University, Japan, ²FUJIFILM Corporation, Japan, ³Shijonawate Gakuen University, Japan

#### PS-01-p-052 Effect of n-3 PUFA-rich TGs on Lipid Metabolism of Obese/diabetic KK-Ay Mice

Masashi Hosokawa, Kazuhiro Hashimoto, Yuki Sawada, Kazuo Miyashita Hokkaido University, Japan

#### PS-01-p-053 Comparison of the effects of EPA and DHA on the development of NASH

Noriko Kemuriyama, Takashi Matsuzaka, Takeuchi Yoshinori, Nakagawa Yoshimi, Yahagi Naoya, Yamada Nobuhiro, Shimano Hitoshi *University of Tsukuba, Japan* 

# PS-01-p-054 Characteristic MS/MS spectra of fatty acid hydroperoxide isomers recorded in the presence of alkali metals

Shunsuke Mizuochi, Shunji Kato, Junya Ito, Kiyotaka Nakagawa, Teruo Miyazawa *Tohoku University, Japan* 

### PM Nutritional Physiology 2

### PS-01-p-055 Propolis supplementation modulates the angiogenic response to unloading in soleus muscle of rats

Miho Kanazashi¹, Masayuki Tanaka¹, Ryosuke Nakanishi¹, Yusuke Hirayama¹, Toshiyuki Maezawa¹, Hiroyo Kondo², Akihiko Ishihara³, Hidemi Fujino¹

<sup>1</sup>Kobe University, Japan, <sup>2</sup>Nagoya Women's University, Japan, <sup>3</sup>Kyoto University, Japan

#### PS-01-p-056 Effects of the intake of polyphenol on the recovery from anemia in mice

Michiyo Kaneko¹, Takehiko Kaneko², Miho Fujita¹, Satomi Mizuhara¹ ¹Kobe Women's University, Japan, ²Wayo Women's University, Japan

### PS-01-p-057 Protective effects of omega-3 fatty acids on capillary regression in soleus muscle of hindlimb unloaded rats

Masayuki Tanaka<sup>1</sup>, Miho Kanazashi<sup>1</sup>, Ryosuke Nakanishi<sup>1</sup>, Yusuke Hirayama<sup>1</sup>, Toshiyuki Maezawa<sup>1</sup>, Hiroyo Kondo<sup>2</sup>, Akihiko Ishihara<sup>3</sup>, Hidemi Fujino<sup>1</sup>

<sup>1</sup>Kobe University Graduate School of Health Sciences, Japan, <sup>2</sup>Nagoya Women's University, Japan, <sup>3</sup>Kyoto University, Japan



### PS-01-p-058 Association of n-3 polyunsaturated fatty acid levels with sleep disturbance in major depressive disorder

Norie Koga, Kotaro Hattori, Hiroaki Hori, Hiroshi Kunugi

National Institute of Neuroscience, National Center of Neurology and Psychiatry (NCNP), Japan

### PS-01-p-059 The influence of maternal inflammation during gestation on postnatal allergic diseases in murine models

Atsuko Imai, Eka Fujimoto, Kazuto Sato

Japan Women's University, Japan

### PS-01-p-060 Effects of dietary phosphatidylcholine on postprandial lymphatic inflammatory cytokine levels in rats

Bungo Shirouchi, Asuka Kawauchi, Yumiko Furukawa, Yuko Arima, Masao Sato Kyushu University, Japan

#### PS-01-p-061 The Effects of VIA Instant Coffee on Bench Press Performance: The Effects of Habituation

Sean M Mohney, Stephanie Stepp, Grant Slack, Amanda Wise, David Richter, Mike Frank,

Sarah Schleich, Andrew Dunn, Lonnie Lowery

University of Mount Union, USA

# PS-01-p-062 Excitement and calm in Japanese cuisine : Effects of Kaiseki style dishes on mood states and autonomic nerve activity

Takuji Takahashi<sup>1,2</sup>, Kohei Takada<sup>2</sup>, Hanae Yamazaki<sup>3</sup>, Tohru Fushiki<sup>2</sup>

<sup>1</sup>Kinobu restaurant, Japan, <sup>2</sup>Kyoto University, Japan, <sup>3</sup>Ryukoku University, Japan

#### PS-01-p-063 Study on Physiological Function of Lipid Nanoemulsions

Kazuaki Kishita<sup>1</sup>, Kenji Yamamoto<sup>2</sup>, Shingo Hamayama<sup>2</sup>, Masataka Shimizu<sup>2</sup>, Kazuo Nishiyama<sup>1</sup>, Masao Yamasaki<sup>1</sup>

<sup>1</sup>University of Miyazaki, Japan, <sup>2</sup>Miyazaki Prefecture Industrial Technology Center, Japan

### PS-01-p-064 Panaxatriol from *Panax notoginseng* stimulates mTORC1 signaling after resistance exercise in rat skeletal muscle

Yusuke Takamura<sup>1,2</sup>, Yuhei Makanae<sup>2</sup>, Satoru Ato<sup>2</sup>, Naomi Yoshii<sup>2</sup>, Mitsuru Nomura<sup>1</sup>, Akira Uchiyama<sup>1</sup>, Naruhiro Shiozawa<sup>2</sup>, Satoshi Fujita<sup>2</sup>

<sup>1</sup>LION Corporation, Japan, <sup>2</sup>Ritsumeikan University, Japan

### PS-01-p-065 Transcriptomic analysis identities novel genes expression in response to choline deficiency in mouse liver and in rat primary hepatocytes

Rina Watanabe, Kouji Mitsumoto, Hisaki Yonenaka, Takao Hashimoto, Norihisa Kato, Noriyuki Yanaka Hiroshima University, Japan

#### PS-01-p-066 Development of a new method for determination of central fatigue with intracranial selfstimulation

Kazuo Inoue, Satomi Ihi, Satoko Ueno, Miki Isono, Hiromitsu Nagayoshi, Fushiki Tohru Kyoto University, Japan

#### PS-01-p-067 Beta-cryptoxanthin inhibits osteoclast functions in inflammatory bone resorption

Ryota Ichimaru, Tsukasa Tominari, Matsumoto Chiho, Hirata Michiko, Inada Masaki, Miyaura Chisato Tokyo University of Agriculture and Technology, Japan

### PS-01-p-068 Effects of insulin and glucagon on glucose metabolism in primary hepatocytes from rats with spontaneous type 2 diabetes mellitus

Miwako Deguchi<sup>1</sup>, Riho Kobayashi<sup>1</sup>, Akemi Hosoda<sup>1</sup>, Azumi Yamagishi<sup>1</sup>, Hiroaki Oda<sup>2</sup>, Dong-Ho Kim<sup>1</sup>, Shiqeru Saeki<sup>1</sup>

<sup>1</sup>Osaka City University, Japan, <sup>2</sup>Nagoya University, Japan

#### PS-01-p-069 Study on the cell survival regulation by lipids

Shota Nomiyama

University of Miyazaki, Japan

#### PS-01-p-070 Interaction between circadian rhythm and chocolate intake in mice

Yuko Ikeda, Hiroyuki Sasaki, Yuta Hattori, Mayo Kamagata, Shigenobu Shibata Waseda University, Japan

### PS-01-p-071 Soybean and Tempe Consumption Do Not Affect Serum Uric Acid Levels in Sprague-Dawley

Dadi H Maskar, Hardinsyah Hardinsyah, Damayanthi Evy, Astawan Made, Wresdiyati Tuti Bogor Agricultural University, Indonesia

### **Program**



Health Sciences University of Hokkaido, Japan

PS-01-p-073 The effect due to the interaction of different energy and macronutrients ratio on postprandial metabolism

Hidekazu Arai, Chisato Toda, Erika Seki, Yuuya Kajiya, Masae Sakuma University of Shizuoka, Japan

- PS-01-p-074 The role of advanced glycation end products on growth of endometrial cancer Hsin-Yuan Chen, Li-Chung Lin, Yen-Ting Tung, Ting-Fang Cheng, Shih-Min Hsia Taipei Medical University, Taiwan
- PS-01-p-075 The role of advanced glycation end products on growth of leiomyoma
  Ting-Fang Cheng, Yen-Ting Tung, Hsin-Yuan Chen, Li-Chung Lin, Shih-Min Hsia
  Taipei Medical University, Taiwan
- PS-01-p-076 Orientation of the histidine decarboxylase immunoreactive neurons in the rat and mouse hypothalamus

Chinatsu Moriwaki<sup>1,2</sup>, Seiichi Chiba<sup>2</sup>, Taishi Aosa<sup>2</sup>, Hirokazu Kitamura<sup>2</sup>, Keisuke Ina<sup>2</sup>, Yoshihisa Fujikura<sup>2</sup> <sup>1</sup>Nakamura Gakuen University Junior College, Japan, <sup>2</sup>Oita University, Japan

PS-01-p-077 Effects of cold exposure on energy metabolism-related genes expressions in rats with spontaneous metabolic syndrome

Misato Ikutani, Miwako Deguchi, Fumikaza Hayashi, Akemi Hosoda, Azumi Yamagishi, Shin Ebihara, Dong-Ho Kim, Shigeru Saeki
Osaka City University, Japan

- PS-01-p-078 Effects of monosodium glutamate on metabolic disorders in low-birth-weight rats
  Kumiko Takemori, Anna Miyamoto, Tsukasa Tatsumi, Takashi Kometani
  Kinki University, Japan
- PS-01-p-079 Role of Soy Protein and Polydextrose on Appetite and Glycemic Control Christiani Jeyakumar Henry

  A\*star, Singapore
- PS-01-p-080 FGF21 ameliorates methionine-choline deficient diet-induced fatty liver Ryuto Maruyama¹, Makoto Shimizu¹, Jun Inoue¹, Nobuyuki Itoh², Ryuichiro Sato¹ ¹University of Tokyo, Japan, ²Kyoto University, Japan
- PS-01-p-081 AMPK and PPARdelta Activation Improves Endurance in Trained Mice
  Mark Christian C. Manio, Kazuo Inoue, Ai Eguchi, Mina Fujitani, Takayuki Irahara, Tohru Fushiki
  Kyoto University, Japan
- PS-01-p-082 Effects of chronic intake of acetate on muscle fiber type and endurance performance
  Hiromi Yamashita, Chihiro Araoka, Yukihiro Yoshimura, Aya Araki, Masumi Kimoto
  Okayama Prefectural University, Japan
- PS-01-p-083 The effect of starvation in weaning period on diet-related changes in the expression of inflammation-related genes in the adipose tissue

  Kazue Honma¹, Riko Mawatari¹, Misa Ikeda¹, Kazuki Mochizuki², Toshinao Goda¹

  ¹University of Shizuoka, Japan, ²University of Yamanashi, Japan
- PS-01-p-084 Chronic skipping breakfast decrease diet-induced thermogenesis
  Takuya Taira¹, Shizuka Ogawa¹, Yuka Watanabe², Hisao Fujii², Morimasa Kato¹
  ¹Yamaqata Prefectural Yonezawa University of Nutrition Sciences, Japan, ²Sendai University, Japan
- PS-01-p-085 Ketogenic diet induces a unique metabolic state in heart and skeletal muscles Yuiko Hatanaka, Ayano Naka, Kozue Shimizu, Kaoruko lida Ochanomizu University, Japan
- PS-01-p-086 Identification of novel fish-derived peptides lowering blood glucose in mice

  Tatsuhiro Ayabe¹, Wakana Ota¹, Takafumi Mizushige¹, Kohsuke Hayamizu², Kaori Yokoi², Li Han²,
  Tomoko Tsuji², Ryuhei Kanamoto¹, Kousaku Ohinata¹

  ¹Kyoto University, Japan, ²Nippon Suisan Kaisha, Ltd., Japan



#### PS-01-p-087 Effect of caffeine, capsaicin, and several amino acids on the lipid metabolism from chrononutritional view

Kenichiro Misawa, Yuko Ikeda, Shigenobu Shibata

Waseda University, Japan

# PS-01-p-088 Ubiquitin ligase Cbl-b is a negative regulator for insulin-like growth factor 1 signaling during muscle atrophy caused by unloading

Takayuki Uchida<sup>1</sup>, Takeshi Nikawa<sup>1</sup>, Tomoki Abe<sup>1</sup>, Shohei Kohno<sup>2</sup>, Katsuya Hirasaka<sup>3</sup>, Ayako Ohno<sup>1</sup>, Shigetada Kondo<sup>1</sup>, Yuushi Okumura<sup>4</sup>, Edward M. Mills<sup>2,3</sup>

<sup>1</sup>University of Tokushima, Japan, <sup>2</sup>University of Texas at Austin, USA, <sup>3</sup>Nagasaki University, Japan, <sup>4</sup>Sagami Women's University, Japan

### PS-01-p-089 Effect of Yamabushitake mushroom (*Hericium erinaceus*) intake on functional and physicochemical properties of skeletal muscle in mice

Wataru Mizunoya, Toshiya Nakamura, Daisuke Imoto, Yusuke Komiya, Fuminori Kawabata, Mako Nakamura, Ryuichi Tatsumi, Yoshihde Ikeuchi Kyushu University, Japan

# PS-01-p-090 Change of energy expenditure and circulation after single oral dose of flavan-3-ols are induced by the stimulation of sympathetic nerve

Naomi Osakabe, Kodai Inagawa, Naoya Kamio, Rikihiko Ebe, Takuma Suzuki, Masahiro Shibata Shibaura Instutute of Technology, Japan

# PS-01-p-091 Effect of fructose on the phosphorylation of AMP-activated protein kinase and acetyl-CoA carboxylase in HepG2 cells stimulated with placental lactogen

Yuuka Mukai<sup>1</sup>, Yui Miyamoto<sup>1</sup>, Shin Sato<sup>2</sup>

<sup>1</sup>Kanagawa University of Human Services, Japan, <sup>2</sup>Aomori University of Health and Welfare, Japan

### PS-01-p-092 Differential effects of dietary restriction and exercise on lipolysis capacity in white adipose tissue

Yuka Kurosaka<sup>1,2</sup>, Hideki Yamauchi<sup>1</sup>, Yoko Shiroya<sup>2</sup>, Kumiko Minato<sup>2</sup>

<sup>1</sup>Jikei University Of Medicine, Japan, <sup>2</sup>Wayo Women's University, Japan

# PS-01-p-093 Study of the interaction between sterol response element-binding protein (SREBP) and SREBP cleavage-activating protein

Yen-Chou Kuan, Makoto Shimizu, Jun Inoue, Makoto Ryuichiro Sato The University of Tokyo, Japan

#### PS-01-p-094 Transient deficit in energy and carbohydrate increases 24-h fat oxidation

Kaito Iwayama¹, Nana Kurosawa¹, Hitomi Ogata¹, Momoko Kayaba¹, Insung Park¹, Katsuhiko Yajima², Fumi Kobayashi¹, Kazuteru Nakamura³, Maki Sato¹, Naomi Omi¹, Masanobu Hibi⁴, Sachiko Oishi⁴, Koichi Yasunaga⁴, Kumpei Tokuyama¹

<sup>1</sup>University of Tsukuba, Japan, <sup>2</sup>Tokyo Seiei College, Japan, <sup>3</sup>Ibaraki Christian University, Japan, <sup>4</sup>Kao Corporation, Japan

### PS-01-p-095 Oolong, black and pu-erh tea suppresses adiposity in mice via activation of AMP-activated protein kinase

Yoko Yamashita, Liuqing Wang, Hitoshi Ashida Kobe University, Japan

#### PS-01-p-096 Acetic acid increases adenosine monophosphate level and phosphorylation of AMPactivated protein kinase in skeletal muscles

Aya Araki, Yoshimura Yukihiro, Morikami Naoko, Kimoto Masumi, Yamashita Hiromi Okayama Prefectural University, Japan

#### PS-01-p-097 Comparison of flavan-3-ols components on the sympathetic nerve stimulation activity

Yuta Nakagawa, Satomi Abe, Naomi Osakabe Shibaura Institute of Technology, Japan

#### PS-01-p-098 Physiological Effects of L-Theanine on Sleep Onset and Quality of Sleep

Makato Ozeki<sup>1</sup>, Mahendra P. Kapoor<sup>1</sup>, Shuichiro Shirakawa<sup>3</sup>, Tsutomu Okubo<sup>1</sup>

<sup>1</sup>Taiyo Kagaku Co. Ltd., Japan, <sup>2</sup>National Institute of Mental Health, Japan

### **Program**

#### PM Food Science 2

#### PS-01-p-099 Antimicrobial effect of spices for extended shelf life of Spare rib Ham

Jirawan Oonmettaaree

Nakhon Ratchasima Rajabhat University, Thailand

#### PS-01-p-100 The study of the difference in feeding behavior elicited by hunger or palatability

Tatsuya Okahashi, Kazuhiro Sakamoto, Shigenobu Matsumura, Satoshi Tsuzuki, Kazuo Inoue, Tohru Fushiki

Kyoto University, Japan

#### PS-01-p-101 Effect of rice powder on the texture and viscoelasticity of Starch gels and Gomatofu

Emiko E Sato, Aki A Hasebe

University of Niigata Prefecture, Japan

#### PS-01-p-102 Changes in content of functional elements in onion extract by heat-treatment

Takanori Suzuki<sup>1</sup>, Shigenobu Shiotani<sup>1</sup>, Nobuya Yanai<sup>1,2</sup>

<sup>1</sup>Tokai Bussan Co., Ltd., Japan, <sup>2</sup>National Food Research Institute, NARO, Japan

### PS-01-p-103 Salacinol and Related Analogs, New Leads for Type 2 Diabetes Therapeutic Candidates from the stems of Salacia chinensis

Junji Akaki<sup>1,2</sup>, Toshio Morikawa<sup>1</sup>, Kiyofumi Ninomiya<sup>1</sup>, Eri Kinouchi<sup>1</sup>, Genzoh Tanabe<sup>2</sup>,

Yutana Pongpiriyadacha<sup>3</sup>, Masayuki Yoshikawa<sup>1</sup>, Osamu Muraoka<sup>1</sup>

<sup>1</sup>Kinki University, Japan, <sup>2</sup>Kobayashi Pharmaceutical Co., Ltd., Japan, <sup>3</sup>Rajamangala University of Technology, Thailand

### PS-01-p-104 Search for Chemokine Receptor CCR3 Selective Antagonist as Anti-allergic Principles from Mace, the Arils of *Myristica fragrans*

Ikuko Hachiman, Kazuhiko Matsuo, Kiyofumi Ninomiya, Osamu Muraoka, Takao Hayakawa, Takashi Nakayama, Toshio Morikawa Kinki University, Japan

### PS-01-p-105 Phenylpropanoids from *Alpinia galanga* with Lipid Metabolism-promoting Activity in High Glucose-pretreated HepG2 cells

Yoshiaki Manse<sup>1</sup>, Kiyofumi Ninomiya<sup>1</sup>, Ryosuke Nishi<sup>1</sup>, Chie Sakai<sup>1</sup>, Saowanee Chaipech<sup>2</sup>, Takao Hayakawa<sup>1</sup>, Osamu Muraoka<sup>1</sup>, Toshio Morikawa<sup>1</sup>

<sup>1</sup>Kinki University, Japan, <sup>2</sup>Rajamangala University of Technology Srivijaya, Thailand

### PS-01-p-106 Effects of Extraction Conditions on quality and antioxidant activity of Purple Corn Cob KPSC 903 extracts

Udomlak Sukatta, Prapassorn Rugthaworn, Wetanee Suravanichnirachorn, Ketsaree Klinsuknon, Lalita Khacharat, Thanapoom Maneeboon

Kasetsart University, Thailand

#### PS-01-p-107 Acylated Saponins from Tea Flower, the Flower Buds of *Camellia sinensis*, with Antiproliferative Effects on Human Digestive Tract Carcinoma Cells

Chiaki Motai¹,², Niichiro Kitagawa¹,², Kiyofumi Ninomiya¹, I-Jung Lee³, Masayuki Yoshikawa¹, Osamu Muraoka¹, Toshio Morikawa¹

<sup>1</sup>Kinki University, Japan, <sup>2</sup>Koshiro Co., Ltd., Japan, <sup>3</sup>National Research Institute of Chinese Medicine, Taiwan

# PS-01-p-108 Flavonol Glycosides from Tea Flower, the Flower Buds of Camellia sinensis, with Lipid Accumulation Inhibitory Activity

Shuhei Okugawa<sup>1,2</sup>, Niichiro Kitagawa<sup>1,2</sup>, Kiyofumi Ninomiya<sup>1</sup>, I-Jung Lee<sup>3</sup>, Masayuki Yoshikawa<sup>1</sup>, Osamu Muraoka<sup>1</sup>, Toshio Morikawa<sup>1</sup>

¹Kinki University, Japan, ²Koshiro Co., Ltd., Japan, ³National Research Institute of Chinese Medicine, Taiwan

### PS-01-p-109 Hot water extract of edible *Chrysanthemum morifolium* Ramat. exert antidiabetic effects in obese diabetic KK-A<sup>y</sup> mice

Junpei Yamamoto, Miki Tadaishi, Takumi Yamane, Yuichi Oishi, Makoto Shimizu, Kazuo Kobayashi-Hattori *Tokyo University of Agriculture, Japan* 

# PS-01-p-110 Antioxidant and neuronal PC12 cell protective effects of flavonoids from Epimedium koreanum on hydrogen peroxide-induced oxidative damage

Miran Jang, Gun-Hee Kim, Sunghyun Lee

Duksung Women's University, Korea



# PS-01-p-111 Identification of chlorogenic acid lactones as xanthine oxidase inhibitors produced during the roasting process of coffee beans

Sari Honda<sup>1</sup>, Akiko Masuda<sup>2</sup>, Kento Moriyama<sup>2</sup>, Toshiya Masuda<sup>1</sup> <sup>1</sup>University of Tokushima, Japan, <sup>2</sup>Shikoku University, Japan

#### PS-01-p-112 The anticarcinogenicity of microalgae, Nostoc genus

Akihiro Ohara<sup>1</sup>, Mafumi Kawamura<sup>1</sup>, Yuji Yamaguchi<sup>2</sup>, Hiroyuki Takenaka<sup>2</sup>, Ken-ichiro Minato<sup>1</sup> Meijo University, Japan, <sup>2</sup>MAC Gifu Research Institute, Microalgae Co., Japan

#### PS-01-p-113 In vitro metabolism of kaempferol tetramethylether by rat liver microsomes

Kenta Yamamoto¹, Chiho Ohta¹, Hitomi Ogata¹, Tetsuya Endo², Osamu Kimura², Yoshihisa Kato³, Koichi Haraguchi⁴, Nobuyuki Koga¹

<sup>1</sup>Nakamura Gakuen University, Japan, <sup>2</sup>Health Sciences University of Hokkaido, Japan, <sup>3</sup>Kagawa School of Pharmaceutical Sciences, Tokushima Bunri University, Japan, <sup>4</sup>Daiichi College of Pharmaceutical Sciences, Japan

#### PS-01-p-114 In vitro metabolism of nobiletin in the small intestine and kidney of rats and guinea pigs

Chiho Ohta1, Yoshihisa Kato2, Koichi Haraguchi3, Tesuya Endo4, Nobuyuki Koga1

<sup>1</sup>Nakamura Gakuen University, Japan, <sup>2</sup>Tokushima Bunri University, Japan, <sup>3</sup>Daiichi College of Pharmaceutical Sciences, Japan, <sup>4</sup>Health Sciences University of Hokkaido, Japan

### PS-01-p-115 Simultaneous Ingestion of Quercetin and Apple Pectin Enhances Antioxidant Activity in Rat LDL

Kunihisa Iwai<sup>1</sup>, Fuduki Takami<sup>1</sup>, Kumiko Yamashita<sup>1</sup>, Emi Miura<sup>1</sup>, Yoshiki Takida<sup>2</sup>, Tomohiko Nishijima<sup>2</sup> <sup>1</sup>Aomori University of Health and Welfare, Japan, <sup>2</sup>Glico Dairy Products Co., Ltd., Japan

### PS-01-p-116 A Study of Relationship Between the Flavonoid Absorption Enhancing Effect of Apple Pectin and the Structure of Flavonoids

Emi Miura<sup>1</sup>, Kumiko Yamashita<sup>1</sup>, Toshio Norikura<sup>1</sup>, Tomohiko Nishijima<sup>2</sup>, Kunihisa Iwai<sup>1</sup> Aomori University of Health and Welfare, Japan, <sup>2</sup>Glico Dairy Products Co., Ltd., Japan

#### PS-01-p-117 Screening of rice (Oryza sativa L.) grains with antidiabetic functionalities

Yasutake Tanaka<sup>1</sup>, Kiyomi Takahashi<sup>1</sup>, Jun-ichi Kato<sup>1</sup>, Taiki Akasaka<sup>1</sup>, Naoko Fujita<sup>2</sup>, Yuhi Saito<sup>3</sup>, Bungo Shirouchi<sup>1</sup>, Masao Sato<sup>1</sup>

<sup>1</sup>Kyushu University, Japan, <sup>2</sup>Akita Prefectural University, Japan, <sup>3</sup>KAMEDA SEIKA CO., LTD., Japan

### PS-01-p-118 Induction of neural differentiation by extracts of 57 plant species used in traditional Burmese medicine in PC12 cells

Kei Yoshii<sup>1</sup>, Nyunt Phay<sup>2</sup>, Ukiya Motohiko<sup>1</sup>, Makoto Fukatsu<sup>1</sup>, Atsuyoshi Nishina<sup>1</sup> Nihon University, Japan, <sup>2</sup>Pathein University, Myanmar

### PS-01-p-119 Antimelanogenic effects by extracts of 57 plant species used in traditional Burmese medicine in mouse B16 melanoma

Masaharu Goto<sup>1</sup>, Kodai Ebina<sup>1</sup>, Nyunt Phay<sup>2</sup>, Motohiko Ukiya<sup>1</sup>, Makoto Fukatsu<sup>1</sup>, Atsuyoshi Nishina<sup>1</sup> Nihon University, Japan, <sup>2</sup>Pathein University, Myanmar

### PS-01-p-120 The Total Antioxidant Capacity and Phenolic Compounds of Different Solvent Extracts of Black Mustard Seeds (*Brassica nigra*)

Viduranga Y Waisundara<sup>3</sup>, Yian Hoon Lee<sup>1</sup>, Candy Suet Cheng Choo<sup>2</sup>

<sup>1</sup>Temasek Polytechnic, Singapore, <sup>2</sup>National University of Singapore, Singapore, <sup>3</sup>National Institute of Fundamental Studies, Sri Lanka

### PS-01-p-121 Enhancement of Polyphenols, Antioxidant and Starch Hydrolase Inhibitory Activities of Ten Edible Plants by Kombucha (Tea Fungus) Fermentation

Mindani I Watawana, Viduranga Y Waisundara National Institute of Fundamental Studies, Sri Lanka

### PS-01-p-122 Total Antioxidant Capacity and Starch Hydrolase Inhibitory Activity of Ten Edible Plants in an *in vitro* Model of Digestion

Nilakshi Jayawardena, Viduranga Y Waisundara National Institute of Fundamental Studies, Sri Lanka

#### PS-01-p-123 An Update on Contemporary Functional Foods (FFs)

Sin-fong Lau

Humana (Melchers), Hong Kong

### **Program**

Beneficial effects of Camellia oleifera seed extract on inflammation and insulin resistance in PS-01-p-124 rats with metabolic syndrome

> Hsin-Yi Yang<sup>1</sup>, Wan-Ju Yeh<sup>2</sup>, Tzu-Yao Deng<sup>2</sup>, Jiun-Rong Chen<sup>2</sup> <sup>1</sup>I-Shou University, Taiwan, <sup>2</sup>Taipei Medical University, Taiwan

PS-01-p-125 Enhanced Water Dispersibility of Coenzyme Q<sub>10</sub> by Complexation with Hydrophobic Peptides Obtained as Casein Hydrolysate

Taishi Oue, Tatsuya Oshima, Asuka Inada, Yoshinari Baba University of Miyazaki, Japan

PS-01-p-126 The inhibitory effect of Japanese lacquers on angiotensin-converting enzyme

Tomohiro Narita<sup>1</sup>, Ikumi Sugiyama<sup>1</sup>, Toru Takahashi<sup>2</sup>, Yasuyuki Sadzuka<sup>1</sup> <sup>1</sup>Iwate Medical University, Japan, <sup>2</sup>Iwate Industrial Research Institute, Japan

PS-01-p-127 Effects of fermentation on anticancer properties of Gynostemma pentaphyllum

I-Chuan Sheih, Chi Wen Chen

Ta Hwa University of Science and Technology, Taiwan

Development on the Food Materials and Research to Unused Bio-resources ~Potentiality of PS-01-p-128 Cyanobacterium (Suizenjinori) and Organic Rush~

> Yuki Nakagawa, Kiyotaka Kabata Tokai University, Japan

PS-01-p-129 Induction of cytotoxicity against human cancer cells by extracts of 57 plant species used in traditional Burmese medicine

> Satoshi Hosono<sup>1</sup>, Keita Nagai<sup>1</sup>, Teppei Hayakawa<sup>1</sup>, Morohiko Ukiya<sup>1</sup>, Makoto Fukatsu<sup>1</sup>, Sachiko Kishiro<sup>1</sup>, Nyunt Phay2, Atsuyoshi Nishina1 <sup>1</sup>Nihon University, Japan, <sup>2</sup>Pathein University, Myanmar

Inaccuracy of AOAC method 2009.01 with amyloglucosidase for measuring nondigestible PS-01-p-130 oligosaccharides and proposal for an improvement of the method

> Kenichi Tanabe<sup>1</sup>, Sadako Nakamura<sup>2</sup>, Tsuneyuki Oku<sup>1,2</sup> <sup>1</sup>University of Nagasaki, Japan, <sup>2</sup>Jumonji University, Japan

Enzymatically synthesized glycogen inhibits colitis through decreasing oxidative stress PS-01-p-131 Takakazu Mitani<sup>1</sup>, Yasukiyo Yoshioka<sup>2</sup>, Takashi Furuyashiki<sup>3</sup>, Hitoshi Ashida<sup>1</sup>

<sup>1</sup>Kobe University, Japan, <sup>2</sup>Ezaki Glico Co., Ltd., Japan

Effect of Yabumame (Amphicarpaea bracteata subsp. Edgeworthii var. Japonica) Extract on PS-01-p-132 Low-Density Lipoprotein Oxidation In Vitro

> Lifeng Yang<sup>1</sup>, Jyunichi Kirikoshi<sup>1</sup>, Shogo Sekimoto<sup>1</sup>, Kenji Fukunaga<sup>2</sup>, Ryota Hosomi<sup>2</sup>, Takashi Yamagishi<sup>1</sup>, Hirofumi Arai1

<sup>1</sup>Kitami Institute of Technology, Japan, <sup>2</sup>Kansai University, Japan

PS-01-p-133 Queen Garnet plums in a rat model of diet-induced metabolic syndrome

Maharshi Bhaswant<sup>1,2</sup>, Michael Netzel<sup>3</sup>, Kent Fenning<sup>4</sup>, Lindsay Brown<sup>2</sup>

<sup>1</sup>Victoria University, Australia, <sup>2</sup>University of Southern Queensland, Australia, <sup>3</sup>The University of Queensland, Australia, <sup>4</sup>Queensland Department of Agriculture, Fisheries and Forestry, Australia

Antiaging- from discovery to human clinical trials PS-01-p-134

Chin-Kun Wang

Chung Shan Medical University, Taiwan

PS-01-p-135 The effect of Goto camellia oil administration on skin and liver composition in mice

Daichi Oikawa, Ayano Yoshida, Shunpei Miyazaki, Fumie Muto

Nagasaki University, Japan

Mechanism to suppress blood-ethanol elevation by a shiitake-mushroom extract PS-01-p-136

Mami Hirai, So Hironaka, Makoto Akao, Hitomi Kumagai

Nihon University, Japan

Vespa Amino Acid Mixture improves training efficiency in middle distance runners on high PS-01-p-137 school track team

> Makoto Yamaguchi<sup>1</sup>, Zai-Si Ji<sup>1,2</sup>, Xiaolin Wang<sup>2</sup>, Taketo Yamaji<sup>1</sup>, Hiroyuki Itoh<sup>1</sup> <sup>1</sup>Meiji Co., Ltd., Japan, <sup>2</sup>Shanghai Meiji Health Science and Technology Corp., Ltd, China

# PS-01-p-138 S



PS-01-p-138 Suppressive effect of phenethyl isothiocyanate on gluconeogenesis in rat hepatoma cell line H4IIE cells

Asami Suzuki<sup>1</sup>, Yoshiaki Ito<sup>2</sup>, Takashi Nagasawa<sup>2</sup> Iwate University, Japan

PS-01-p-139 Collagen peptide ingestion alters the expression of genes related to lipid metabolism and unfolded protein response (UPR) in mouse liver

Chisa Tometsuka¹, Yoh-ichi Koyama¹, Yuji Nakai², Tomoko Ishijima³, Tsudoi Toyoda³, Miki Teranishi⁴, Kazushige Takehana⁴, Keiko Abe³,⁵

<sup>1</sup>Research Institute of Biomatrix, Nippi Inc., Japan, <sup>2</sup>Hirosaki University, Japan, <sup>3</sup>The University of Tokyo, Japan, <sup>4</sup>Rakuno Gakuen University, Japan, <sup>5</sup>Kanagawa Academy of Science and Technology, Japan

PS-01-p-140 Inhibition of secretory sphingomyelinase by (-)-epicatechin-3-O-gallate

Keiko Kobayashi, Yuki Ishizaki, Moe Miyamoto, Hiroe Kikuzaki

Nara Women's University, Japan

PS-01-p-141 Oral Administration of Hyaluronic Acid Alleviates Symptoms of Adjuvant Arthritis in Mice Xingwei Hang<sup>1</sup>, Jie Chen<sup>1</sup>, Yasunobu Masuda<sup>2</sup>, Mamoru Kimura<sup>2</sup>, Mike Usuda<sup>2</sup>, Wei Wang<sup>2</sup>, Yinci Xi<sup>1</sup> Shanghai Ocean University, China, <sup>2</sup>Kewpie Corporation, Japan

PS-01-p-142 Soy isoflavone metabolite, S-equol, relieves endothelial dysfunction and bone loss in ovariectomised rats

Yuko Tousen¹, Michiko Kato¹, Yoriko Nishide¹, Tomomi Ueno², Shigeto Uchiyama², Yoshiko Ishimi¹ ¹National Institute of Health and Nutrition, Japan, ²Otsuka Pharmaceutical Co., Ltd., Japan

PS-01-p-143 Antioxidative potential of rutin on dextran sodium sulphate-induced ulcerative colitis mice model

Agustin Martin-Morales<sup>1</sup>, Kotomi Ikeda<sup>1</sup>, Eri Yamaguchi<sup>1</sup>, Kazuhiro Misumi<sup>2</sup>, Yukiko Minamiyama<sup>2</sup>, Junji Terao<sup>1</sup>

<sup>1</sup>The University of Tokushima, Japan, <sup>2</sup>Kyoto Prefectural University, Japan

PS-01-p-144 Effects of dietary lycopene rich tomato powder on rat mammary carcinogenesis induced by ethyl methanesulphonate

Mikako Takeshima, Misaki Ono, Takako Higuchi, Rei Wakimoto, Shuji Nakano Nakamura Gakuen University, Japan

PS-01-p-145 Nattoesse inhibits the increase in serum lipid levels of ApoE deficient mice fed by high-fat diet

Hideaki Suzuki<sup>1</sup>, Koji Kobayashi<sup>1</sup>, Yuuko Kosuge<sup>1</sup>, Tsuyoshi Sugiyama<sup>2</sup>

<sup>1</sup>Kitasato Junior College of Health and Hygienic Sciences, Japan, <sup>2</sup>OTO Corporation

PS-01-p-146 The effects of isoflavones and resistant starch on inhibition of bone loss and increase in fat mass in ovariectomised mice

Yu Matsumoto<sup>1</sup>, Yuko Tosen<sup>1</sup>, Rina Ono<sup>2</sup>, Yuya Nagahata<sup>3</sup>, Isao Kobayashi<sup>3</sup>, Yoshiko Isimi<sup>1</sup>
<sup>1</sup>National Institute of Health and Nutrition, Japan, <sup>2</sup>Kanto Gakuin University, Japan, <sup>3</sup>J-OIL MILLS, INC., Japan

PS-01-p-147 Anti-hypertensive peptide (KBP) derived from katsuobushi

Eiji Seki¹, Yoshifumi Fujiwara¹, Hitoshi Asada¹, Takuya Yamane², Hiroyoshi Ariga², Iwao Ohkubo³, Akihisa Yamamoto⁴, Hideo Satsu⁴

<sup>1</sup>Yamaki Co., Ltd., Japan, <sup>2</sup>Hokkaido University, Japan, <sup>3</sup>Tenshi College, Japan, <sup>4</sup>Maebashi Institute of Technology, Japan

PS-01-p-148 Dietary supplementation with Aloe vera gel powder (AVGP) prevents skin photoaging acceleration by sex hormone reduction in ovariectomized hairless mice

Ruiqing Yao, Miyuki Tanaka, Eriko Misawa, Marie Saito, Kazumi Nabeshima, Kouji Yamauchi, Fumiaki Abe

Morinaga Milk Industry Co., Ltd., Japan

PS-01-p-149 Effect of sesame oil on 3T3L1 adipocytes

Katsuhiko Minamino

Hagoromo University of International Studies, Japan

PS-01-p-150 Quercetin reduces apolipoprotein B expression through an inhibition of C/EBPbeta activity

Makoto Shimizu, Juan Li, Jun Inoue, Ryuichiro Sato

The University of Tokyo, Japan

PS-01-p-151 The effect of capsaicin on brown adipogenesis

Ryosuke Kida, Teruo Kawada, Tohru Matsui, Masayuki Funaba

Kyoto University, Japan

### **Program**



Tamaki Jikyo, Fumiaki Uchiyama Osaka Yuhigaoka Gakuen Junior College, Japan

PS-01-p-153 Inhibitory Effects of Moringa oleifera Extract on Tyrosinase Activity and Inhibitory **Mechanism on Melanogenesis** 

Yi-Fa Lu, Chin-Hui Lin

Fu-Jen Catholic University, Taiwan

Comparative study of the effect of dietary sovbean phospholipids on concanavalin PS-01-p-154 A-induced liver injury in mice

Masashi Inafuku, Naoyuki Taira, Ruwani N. Nugara, Hirosuke Oku

University of the Ryukyus, Japan

PS-01-p-155 Activities of anti-inflammation and lipogenic inhibition of Antrodia salmonea mycelium and Grifola frondosa fruiting body

Rao-Chi Chien<sup>1,2</sup>, Yi-Chi Yang<sup>1</sup>, Jeng-Leun Mau<sup>1,2</sup>

<sup>1</sup>National Chung Hsing University (NCHU), Taiwan, <sup>2</sup>University of California at Davis, USA

In vivo study of processed soymilk containing ACE inhibitory peptides improved PS-01-p-156 hypertension in spontaneously hypertensive rats

> Md Alauddin<sup>1</sup>, Hitoshi Shirakawa<sup>1</sup>, Kazuyuki Hiwatashi<sup>2</sup>, Atsushi Shimakage<sup>3</sup>, Saori Takahashi<sup>2</sup>, Mamoru Shinbo3, Michio Komai1

<sup>1</sup>Tohoku University, Japan, <sup>2</sup>Akita Research Institute of Food and Brewing, Japan, <sup>3</sup>Yamada Food Co., Ltd., Japan

Rapid determination of serotonin, tryptophan and tryptamine levels in commonly consumed PS-01-p-157 foods in Japan using fluorescence HPLC

> Jahidul Islam<sup>1</sup>, Hitoshi Shirakawa<sup>2</sup>, Tomas Kim Nguyen<sup>3</sup>, Hisahi Aso<sup>4</sup>, Michio Komai<sup>5</sup> Tohoku University, Japan

Xanthohumol improves diet-induced obesity and fatty liver by suppressing the proteolytic PS-01-p-158 activation of SREBPs

Shingo Miyata, Jun Inoue, Makoto Shimizu, Ryuichiro Sato

The University of Tokyo, Japan

PS-01-p-159 Allium hookeri Inhibits Lipid Accumulation by Regulating the Expression of Adipogenic Transcription Factors During Differentiation in 3T3-L1 Cells

> Hye-Young Choi, Gun-Hee Kim Duksung Womens University, Korea

PS-01-p-160 The anthocyanin delphinidin 3-rutinoside stimulates GLP-1 secretion via calcium signaling pathway

Tsubasa Tani, Masaki Kato, Takanori Tsuda

Chubu University, Japan

Absorption and blood kinetics of dipeptides and tripeptides after oral administration of PS-01-p-161 collagen peptide

> Fumitaka Hayasaka<sup>1</sup>, Shoko Yamamoto<sup>1</sup>, Kisaburo Deguchi<sup>2</sup>, Yasuo Sakai<sup>1</sup> <sup>1</sup>Jellice Co., Ltd., Japan, <sup>2</sup>Medical Care Proteomics Biotechnology Co., Ltd., Japan

Enhancing Effect on Radical-scavenging Activity of Japanese Edible Algae by Heat PS-01-p-162 treatment

Akiko Takenouchi<sup>1</sup>, Kiyoka Okai<sup>1</sup>, Tokiko Uenaka<sup>1</sup>, Yasuji Okai<sup>2</sup>

<sup>1</sup>Mukogawa Women's University, Japan, <sup>2</sup>Hagoromo University of International Studies, Japan

Effect of fermented plant product on colonic luminal environment in rats fed a high fat diet PS-01-p-163 Yongshou Yang<sup>1</sup>, Vivi Novita Sitanggang<sup>1</sup>, Yukako Okazaki<sup>2</sup>, Hiroyuki Tomotake<sup>3</sup>, Kentaro Arita<sup>4</sup>, Takayuki Ashida4, Norihisa Kato1

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Seaweeds and Health and Wellbeing PS-01-p-164

Leonora N. Panlasigui, Marco Nemesio E. Montano

University of the Philippines, Philippines



#### PS-01-p-165 Intestinal absorption of orally administered hyaluronan and its effect on skin

Takumi Kubota<sup>1</sup>, Hitoshi Kurihara<sup>1,2</sup>, Chinatsu Kawada<sup>1,2</sup>, Hideto Yoshida<sup>1</sup>, Mamoru Kimura<sup>1</sup>, Tomoyuki Kanemitsu<sup>1</sup>, Yasunobu Masuda<sup>1</sup>, Yoshihiro Nomura<sup>2</sup>

<sup>1</sup>Kewpie Corporation, Japan, <sup>2</sup>Tokyo University of Agriculture and Technology, Japan

### PS-01-p-166 Diffusion coefficient as an evaluation factor of interaction and behavior of the each chiral lipoic acid-cyclodexitrin inclusion complex

Matsumi Doe, Keisuke Nishikawa, Yoshimitsu Tachi, Yoshiki Morimoto

Osaka City University, Japan

# PS-01-p-167 The collagen-derived tripeptide, glutamyl-hydorxyprolyl-glycine (Glu-Hyp-Gly) promotes differentiation of MC3T3-E1 osteoblastic cells

Yuri Taniuchi<sup>1</sup>, Yoshifumi Kimira<sup>1</sup>, Aya Kataoka<sup>2</sup>, Naoki Inoue<sup>2</sup>, Fumihito Sugihara<sup>2</sup>, Hiroshi Mano<sup>1</sup> Josai University, Japan, <sup>2</sup>Nitta Gelatin inc, Japan

### PS-01-p-168 The combinational effects of pioglitazone and fish oil on glucose and lipid metabolism and oxidative stress in KK mice

Yuzuru Iizuka, Hyounju Kim, Takuya Izawa, Maki Nakasatomi, Akiyo Matsumoto

Josai University, Japan

### PS-01-p-169 Quality characteristics of centrifuged broth from blanched Pleurotus eryngii and its application as instant drink

Sheng-Dun Lin<sup>1</sup>, Yu-Ting Wu<sup>1</sup>, Jeng-Leun Mau<sup>2</sup>

<sup>1</sup>Hungkuang University, Taiwan, <sup>2</sup>National Chung Hsing University, Taiwan

# PS-01-p-170 Identification and quantification of water-soluble metabolites in culinary and medicinal mushrooms using proton NMR

Yu-Chang Lo<sup>1</sup>, Darya O. Mishchuk<sup>2</sup>, Carolyn M. Slupsky<sup>2</sup>, Jeng-Leun Mau<sup>1</sup>

<sup>1</sup>National Chung Hsing University (NCHU), Taiwan, <sup>2</sup>University of California (UC) at Davis, USA

### PS-01-p-171 Effects of dietary black soybean on blood pressure and lipid metabolism in spontaneously hypertensive rats (SHR)

Nozomi Tateiwa, Tamaru Shizuka, Iwanaga Hikari, Morikawa Tomomi, Kawabeta Koji, Noda Takahiro, Nagata Yasuo, Koba Kazunori *University of Nagasaki, Japan* 

### PS-01-p-172 Benefits of subaleurone layer of milled rice (Kinmemai) :Analysis of Kinmemai from the view point of glycemic index food

Maya Uenobe<sup>1</sup>, Kazue Nakata<sup>3</sup>, Hiroyuki Inagawa<sup>2</sup>

<sup>1</sup>Nagoya Keizai University, Japan, <sup>2</sup>Kagawa University, Japan, <sup>3</sup>Linking Setouchi Innate Immune Network, Japan

# PS-01-p-173 Supplementation of Chitosan Alleviates High-Fat Diet-Enhanced Liver Lipogenesis in Rats via an AMP-activated Protein Kinase-activated Lipogenesis Inhibition

Shing-Hwa Liu<sup>1</sup>, Chen-Yuan Chiu<sup>1</sup>, Meng-Tsan Chiang<sup>2</sup>, Im-Lam Chan<sup>2</sup>
<sup>1</sup>National Taiwan University, Taiwan, <sup>2</sup>National Taiwan Ocean University, Taiwan

#### PS-01-p-174 The Utilization of Dried Bonito Stick Processing Residue

Lingyu Chen, Huifeng Ren, Hideaki Endo

Tokyo University of Marine Science and Technology, China

#### PS-01-p-175 Effect of Initial Cooling Time on Resistant Starch Contents of Japanese Rice Ball Onigiri

Aya Kamei, Chihiro Hoshi

Miyagi University of Education, Japan

#### PS-01-p-176 Antifungal Activity of Fatty Acid Salts for Food Safety

Aya Tanaka<sup>1</sup>, Mariko Era<sup>1</sup>, Shiho Sakai<sup>1</sup>, Takayoshi Kawahara<sup>2</sup>, Takahide Kanyama<sup>2</sup>, Hiroshi Morita<sup>1</sup>

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#### PS-01-p-177 Comparison of Amylolytic Enzymes Between YAMADANISHIKI and YUMETUKUSHI in Coculture

Haruka Takefuji, Yukae Sato, Junko Ninomiya, Hiroshi Morita The University of Kitakyusyu, Japan

#### PS-01-p-178 The High Enzyme Production by Liquid Culture with Milk

Nanako I, Saki Mikai, Junko Ninomiya, Hiroshi Morita

The University of Kitakyushu, Japan

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#### Clinical Nutrition 2

### PS-01-p-179 Effectiveness of BeMo Team Battle weight loss program combined group intervention for obese adult

Phawinpon Chotwanvirat<sup>1,2</sup>, Panita Chaturawit<sup>1</sup>, Haruethai Jaita<sup>1</sup>, Kewalin Wattanawiroon<sup>1</sup>, Phatt Thaitrong<sup>1</sup>, Tanya Vannapruegs<sup>1</sup>, Yotsapon Thewjitcharoen<sup>1</sup>, Thep Himathongkam<sup>1</sup>

<sup>1</sup>Theptarin Hospital, Thailand, <sup>2</sup>Valaya Alongkorn Rajabhat University under the Royal Patronage, Thailand

# PS-01-p-180 Efficacy of Green Tea Catechins on Oxidative Fat Metabolism at Rest and During Endurance in Healthy Humans

Masaaki Sugita<sup>1</sup>, Mahendra P. Kapoor<sup>2</sup>, Akinobu Nishimura<sup>3</sup>, Tsutomu Okubo<sup>2</sup>
<sup>1</sup>University of Mie, Japan, <sup>2</sup>Taiyo Kagaku Co. Ltd., Japan, <sup>3</sup>Graduate School of Medicine, University of Mie, Japan

#### PS-01-p-181 Outcomes of the Intensive Weight Management Program in Thai female obesity

Charunee Thiabpho¹, Ngamphol Soonthornworasiri¹, Bencha Yoddumnern-Attig¹, Patcharaporn Thaboot², Pattharawan Nissayan³, Karunee Kwanbunjan¹

<sup>1</sup>Mahidol University, Thailand, <sup>2</sup>Pralub Health Promotion Hospital, Thailand, <sup>3</sup>Banpue Health Promotion Hospital, Thailand

#### PS-01-p-182 The effect of IL-1 beta on UCP1 expression in adipocytes

Yuki Hanafusa¹, Teruo Kawada¹, Nobuyuki Takahashi¹, Tsuyoshi Goto¹, Hideo Matsuda², Shigeto Seno², Hiromi Daiyasu², Naknukool Supaporn¹, Tomoya Sakamoto¹, Rieko Yoshitake¹ ¹Kyoto University, Japan, ²Osaka University, Japan

# PS-01-p-183 Associations of plasma cholesteryl ester palmitoleic acid with inflammatory markers and metabolic syndrome in Japanese men and women

Shiori Sugawara<sup>1,2</sup>, Takemi Akahane<sup>3</sup>, Kennichi Fukui<sup>3</sup>, Ikuyo Tsukamoto<sup>2,4</sup>
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#### PS-01-p-184 Effectiveness of Lactobacillus Shirota in Body Weight Management

Golgis Karimi, Rosita Jamaluddin Universiti Putra Malaysia, Malaysia

### PS-01-p-185 Beneficial effects of rice endosperm protein intake in Japanese men with obesity or metabolic syndrome: a fundamental crossover clinical trial

Michihiro Hosojima<sup>1</sup>, Ryohei Kaseda<sup>1</sup>, Hazuki Kondo<sup>2</sup>, Mikio Fujii<sup>2</sup>, Kubota Masatoshi<sup>1</sup>, Watanabe Reiko<sup>3</sup>, Kadowaki Motoni<sup>1</sup>, Akihiko Saito<sup>1</sup>

<sup>1</sup>Niigata University, Japan, <sup>2</sup>Kameda Seika, Japan, <sup>3</sup>University of Niigata Prefecture, Japan

#### PS-01-p-186 Effect of Exercise on Body Fat among Overweight Elderly Malay Women

Mahenderan Appukutty, Siti Nadhrah Othman, Norlizah Abdul Hamid Universiti Teknologi MARA, Malaysia

#### PS-01-p-187 Body Image Management and Dietary Behavior of University Students

Joon Ho Lee, Wei Hu

Chungnam National University, Korea

### PS-01-p-188 Profil of peptida YY, ghrelin, hunger, satiety and ad libitum intake of obes and non Obes Indonesian women: Preliminary study

Fiastuti Witjaksono

Universitas Indonesia, Indonesia

#### PS-01-p-189 The Dietary Management after Bariatric Surgery in Taiwan

I-chi Cheng, Shu Chen Wei, Weu Wang, Sung-Ling Yeh

Taipei Medical University Hospital, Taiwan

# PS-01-p-190 Clinical nutritional study in the infertility of Japanese thinness woman with the menstruation abnormality

Keiko Ushigome<sup>1</sup>, Hideki Taniguchi<sup>1</sup>, Satomi Maruyama<sup>2</sup>, Masayuki Totani<sup>3</sup>

<sup>1</sup>Kanagawa University of Human Services, Japan, <sup>2</sup>Kinjo Gakuin University, Japan, <sup>3</sup>Showa Women's University, Japan

# PS-01-p-191 Effects of a milk preload on glycemia, insulin and incretin after a boiled rice consumption in type2 diabetes

Kaori Sueda<sup>1</sup>, Eiko Sakai<sup>1</sup>, Tomoko Uno<sup>1</sup>, Yuzo Sato<sup>2</sup>

<sup>1</sup>Aichi Gakuin University, Japan, <sup>2</sup>Aichi Mizuho University, Japan



#### PS-01-p-192 Anti-diabetic activity of aculeatin derived from Toddalia asiatica (L.) Lam

Akio Watanabe<sup>1,2</sup>, Tsuyoshi Kato<sup>1</sup>, Yusuke Ito<sup>1</sup>, Teppei Harada<sup>1</sup>, Junya Ito<sup>2</sup>, Masahiro Ide<sup>1</sup>, Momochika Kumagai<sup>1</sup>, Izumi Yoshida<sup>1</sup>, Takashi Mishima<sup>1</sup>, Kazuhiro Fujita<sup>1</sup>, Masatoshi Watai<sup>1</sup>, Kiyotaka Nakagawa<sup>2</sup>, Teruo Miyazawa<sup>2</sup>

<sup>1</sup>Japan Food Research Laboratories, Japan, <sup>2</sup>Tohoku University, Japan

#### PS-01-p-193 Can bread processing conditions alter glycaemic response?

Evelyn Ruo Lin Lau<sup>1</sup>, Jeyakumar Henry<sup>1,2</sup>

<sup>1</sup>Singapore Institute for Clinical Sciences, Singapore, <sup>2</sup>National University of Singapore, Singapore

#### PS-01-p-194 Influences of the Glyfola gargal extract dosage on insulin resistance induced by high-

fructose diet in the rats

Kaori Kitakoshi

Nagoya Bunri University, Japan

#### High-risk drinking is associated with a higher risk of diabetes mellitus in Korean men, based PS-01-p-195

on the 2010-2012 KNHANES

Hee-Taik Kang, Shin-Hye Kim, Tae-Ha Jung

Gangnam Severance Hospital, Yonsei University, Korea

#### Effects of Nutritional Intervention on Weight Change and Blood Sugar Control in Diabetic PS-01-p-196

**Patients with Obstructive Sleep Apnea Syndrome** 

Chikako Hibino, Manami Oikawa, Shinichi Okabe

Okabe Clinic, Japan

#### Production and clearance of toxic aldehydes by fibroblast on collagen PS-01-p-197

Mona Sato<sup>1</sup>, Eun Young Park<sup>2</sup>, Yasushi Nakamura<sup>2</sup>, Kenji Sato<sup>1</sup> <sup>1</sup>Kyoto University, Japan, <sup>2</sup>Kyoto Prefectural University, Japan

#### PS-01-p-198 Changes in dietary intakes during a simple and moderate low-carbohydrate diet in Japanese

outpatients with type 2 diabetes

Tae Sasakabe<sup>1</sup>, Nahomi Imaeda<sup>2</sup>, Hajime Haimoto<sup>3</sup>, Kenji Wakai<sup>1</sup>

<sup>1</sup>Nagoya University, Japan, <sup>2</sup>Nagoya Women's University, Japan, <sup>3</sup>Haimoto Clinic, Japan

#### PS-01-p-199 Can a Low Glycaemic Index (GI) Diet Influence Blood Glucose Profiles and Energy Intake?

Bhupinder Kaur, Jeyakumar Henry

National University of Singapore, Singapore

#### Effects of medium-chain triglycerides on gene expression related to energy and lipid PS-01-p-200

metabolism in streptozotocin induced type 1 diabetic rats Chihiro Kuroiwa<sup>1</sup>, Sizuka Tamaru<sup>2</sup>, Kazunori Koba<sup>2</sup>, Jun-ichi Nagata<sup>1</sup>

<sup>1</sup>Fukuoka Institute of Technology, Japan, <sup>2</sup>University of Nagasaki, Siebold, Japan

#### Association among serum homocysteine, adipocytokines and gestational diabetes mellitus PS-01-p-201

Rongxian Xu<sup>1,2,3</sup>, Weiqin Wang<sup>1</sup>, Jifen Hu<sup>2</sup>, Xueqin Zhang<sup>3</sup>

<sup>1</sup>Tumor Hospital of Fujian Province, China, <sup>2</sup>Fujian Medical University, China, <sup>3</sup>Xiamen Maternal and Children Hospital, China

#### PS-01-p-202 Effect of aerobic exercise on body composition, HOMA-IR, and lipid profile in healthy nondiabetic with elevated risk of diabetes subjects

Ardy Brian Lizuardi, Kamalita Pertiwi, Astri Kurniati, Susana Xie

PT. Nutrifood Indonesia, Indonesia

#### PS-01-p-203 Effect of continuous support for older adults with diabetes

Tetsuko Tejima<sup>1</sup>, Hiroko Kito<sup>1</sup>, Ritsuko Tanaka<sup>1</sup>, Megumi Sakamoto<sup>1</sup>, Risako Sato<sup>2</sup>, Miyuki Kozuka<sup>3</sup>, Rumiko Sugimura<sup>1</sup>, Chisa Yamashita<sup>1</sup>, Akina Chiba<sup>1</sup>, Kumiko Nishio<sup>1</sup>

<sup>1</sup>Hokkaido Bunkyo University, Japan, <sup>2</sup>Rakuno Gakuen University, Japan, <sup>3</sup>Hokkaido University, Japan

#### PS-01-p-204 Usefulness of carotid imaging rather than traditional atherogenic lipoprotein markers in prediabetics

Yoko Watanabe, Masami Tukada, Kiyomi Ishiguro, Chikako Kasuga, Keiko Kamachi, Akira Tanaka, Yasuo Kagawa

Kagawa Nutrition University Nutrition Clinic, Japan

#### Maternal dietary EFA ratio before and after pregnancy affected the development of T1D in PS-01-p-205 the offspring of NOD mice

Yukiko Kagohashi, Hiroki Otani Shimane University, Japan

### **Program**

# PS-01-p-206 Evaluating the Accuracy of Food Consumption Input by Diabetes Patients into DialBetics with FoodLog, a Multimedia Food Recording Tool

Shigeko Kato¹, Kayo Waki¹.², Hanae Lee¹, Kiyoharu Aizawa¹, Makoto Ogawa³, Haruka Kobayashi⁴, Takashi Kadowaki², Hideko Fujita¹, Kazuhiko Ohe¹

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#### PS-01-p-207 Food photograph in dietary assessment among dietitians

Wen-Chin Yeh<sup>1</sup>, Chia-Hsuan Lin<sup>1</sup>, Shu-Yen Feng<sup>1</sup>, Mon-Chiou Lin<sup>1</sup>, Yi-Wen Chen<sup>1</sup>, Ming-Yin Cheng<sup>1</sup>, Yin-Ting Chin<sup>1</sup>, Yu-Hung Chang<sup>1</sup>, Chung-Mei Ouyang<sup>2</sup>, Yau-Jiunn Lee<sup>1</sup>

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#### PS-01-p-208 Relationship between Plasma Glucose and HbA1c in Thai population

Suwimol Sapwarobol<sup>1</sup>, Somnuke Gulsatitporn<sup>1</sup>, Sirinate Krittiyawong<sup>2</sup>, Thep Himathongkam<sup>2</sup> <sup>1</sup>Chulalongkorn University, Thailand, <sup>2</sup>Theptarin Hospital, Thailand

#### PS-01-p-209 Chronic chlorella intake improves metabolic syndrome risks in obese type 2 diabetic rats

Horii Naoki¹, Sato Koji¹, Hasegawa Natsuki¹, Fujie Shumpei¹, Mizoguchi Toru², Onishi Masato², Iemitsu Motoyuki¹

<sup>1</sup>Ritsumeikan University, Japan, <sup>2</sup>Sun Chlorella Corp., Japan

### PS-01-p-210 Usefulness of a new nutritional counseling network system for Japanese type 2 diabetic patients with obesity

Mariko Hayakawa<sup>1,2</sup>, Mika Ando<sup>3</sup>, Ryoko Katsuta<sup>3</sup>, Jun-ichiro Miyagawa<sup>4</sup>

<sup>1</sup>Nagoya Keizai University, Japan, <sup>2</sup>Nagoya Keizai University Clinical Nutrition Center, Japan, <sup>3</sup>Mark Corporation, Japan, <sup>4</sup>Hyogo College of Medicine, Japan

### PS-01-p-211 Relationship Profiling between Fatty Acids and Metabolic Syndrome Components among Taiwanese Adults

Kuo-Liong Chien, Yu-Kang Tu, Hung-Ju Lin, Hsiung-Ching Hsu, Ta-Chen Su, Ming-Fong Chen National Taiwan University, Taiwan

#### PS-01-p-212 Glycemic Index and Glycemic Load of New Breeding Lines of Thai Rice Varieties

Jureeporn Nounmusig, Prapaisri P Sirichakwal, Uruwan Yamborisut, Ratchanee Kongkachuichai, Rin Charoensiri, Aurawan Kringkasemsri

Mahidol University, Thailand

PS-01-p-213 Proteoglycan-supplementation in drinking water suppressed elevation of the blood glucose level in high-fat-diet induced obese mice

Shouhei Hirose, Krisana Asano, Akio Nakane Hirosaki University Graduate School of Medicine, Japan

# PS-01-p-214 Lipid accumulation product, lipid peroxidation and oxidative stress in type 2 diabetic patients

Harshi Prasadini Gunawardena<sup>1</sup>, Renuka R Silva<sup>1</sup>, Ramaiah Sivaknesan<sup>2</sup>, Prasad Katulanda<sup>3</sup>
<sup>1</sup>Wayamba University of Sri Lanka, Sri Lanka, <sup>2</sup>University of Peradeniya, Sri Lanka, <sup>3</sup>University of Colombo, Sri Lanka

#### PS-01-p-215 Major depressive disorder and initial insulin hyposecretion in oral glucose tolerance test

Emiko Aizawa<sup>1</sup>, Sumiko Yoshida<sup>2</sup>, Shokichi Tajima<sup>2</sup>, Kotaro Hattori<sup>1</sup>, Kazuhiko Segawa<sup>2</sup>, Hiroshi Kunugi<sup>1</sup> National Institute of Neuroscience, National Center of Neurology and Psychiatry, Japan, <sup>2</sup>National Center Hospital, National Center of Neurology and Psychiatry, Japan

# PS-01-p-216 Effect of vinegar ingestion before meal on glycemic indices in well controlled type 2 diabetic patients

Azadeh Nadjarzadeh, Reyhaneh Bashiri, Akram Ghadiri, Fahimeh Mazidi Sharif Abad, Hossein Fallahzadeh

Shahid Sadoughi University of Medical Sciences, Iran

### PS-01-p-217 Development and clinical trials of food that suppress increment of the postprandial blood glucose by addition of functional foodstuff

Aya Ishigami, Maki Nakahigashi, Nodoka Nago, Nobuyuki Tanahashi, Yoichi Nagamura Suzuka University of Medical Science, Japan

### PS-01-p-218 Patterns of consuming beliefs and the use of dietary supplements for patients with diabetes Shu-Li Huang

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### Nutritional Epidemiology 2

#### PS-01-p-219 Dietary supplement use and nutritional status of Korean children

Minji Kang<sup>1</sup>, Jae Eun Shim<sup>2</sup>, Hee Young Paik<sup>1</sup>

<sup>1</sup>Seoul National University, Korea, <sup>2</sup>Daejeon University, Korea

### PS-01-p-220 Mid arm circumference is an useful measurement to assess nutritional status for premature infants

Shih-Chien Huang<sup>1</sup>, Ming-Sheng Lee<sup>2</sup>, Hung-Lin Chen<sup>2</sup>, Jou-Huai Lin<sup>1</sup>, Chin-Lin Hsu<sup>1</sup> Chung Shan Medical University, Taiwan, <sup>2</sup>Changhua Christian Hospital, Taiwan

#### PS-01-p-221 The result of the health examination in junior high school students in south India

Mari Mori¹, S Saravanan², K Kokila², A Anbumalar², Hideki Mori¹, Arun Kumar Garg³, Shigehiro Tanaka³, S Sethupathy², N Chidambaram², Arun Chockalingam⁴, Yukio Yamori¹

<sup>1</sup>Mukogawa Women's University, Japan, <sup>2</sup>Annamalai University, India, <sup>3</sup>Fraser Health Authority, Canada, <sup>4</sup>University of Toronto, Canada

### PS-01-p-222 Dietary Diversity is Associated with Increased Micronutrients Intake of Rural Pregnant Women of Bangladesh

Syed Mahfuz Al Hasan, Sonjoy Saha, Md. Masum Billah, Md. Mahedi Hassan, Audity Biswas Mou, Md. Mominul Islam

Jessore University of Science and Technology, Bangladesh

### PS-01-p-223 An attempt to promote myogenesis in the pig by adding taurine to maternal diet during pregnancy and lactation

Masaya Katsumata<sup>1</sup>, Hiroko Toyoda<sup>2</sup>

<sup>1</sup>Azabu University, Japan, <sup>2</sup>NARO Institute of Livestock and Grassland Science, Japan

# PS-01-p-224 Daily Intake Of Milk And Dairy Product Contributes To Better Nutritional Status Indices Among Indonesian Preschool Children

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# PS-01-p-225 Association between carbohydrate intake and abnormal glucose tolerance in Japanese pregnant women

Ryoko Tajima¹, Yoko Yachi², Yui Anasako¹, Yasuhiro Tanaka³, Kaoruko T lida¹, Hirohito Sone⁴¹Ochanomizu University, Japan, ²Yamanashi Gakuin University, Japan, ³Tanaka Women's Clinic, Japan, ⁴Niigata University Faculty of Medicine, Japan

# PS-01-p-226 Effects of the National School Lunch Program on the Bone Mass of Elementary School Children in Japan

Toshiyuki Kohri, Naoko Kaba, Kentaro Yoshikawa, Eriko Matsuoka Kinki University, Japan

### PS-01-p-227 A child feeding index is superior to WHO IYCF indicators in explaining length-for-age Z-scores of young children in rural Cambodia

Anika Reinbott<sup>1</sup>, Judith Kuchenbecker<sup>1</sup>, Johannes Herrmann<sup>1</sup>, Irmgard Jordan<sup>1</sup>, Ellen Muehlhoff<sup>2</sup>, Ou Kevanna<sup>3</sup>, Michael Krawinkel<sup>1</sup>

<sup>1</sup>Justus Liebig University, Germany, <sup>2</sup>The Food and Agricultural Organization of the United Nations, Italy, <sup>3</sup>National Maternal and Child Health Center, Cambodia

### PS-01-p-228 Polyunsaturated fatty acids profile of maternal erythrocytes and its determinants in Japanese pregnant women from an adjunct JECS cohort

Kunihiko Nakai¹, Shoji Saitoh¹.², Terue Kawabata³, Fumiko Kimura¹, Nozomi Tatsuta¹, Kiyotaka Nakagawa¹, Teruo Miyazawa¹, Takahiro Arima¹, Yasuo Kagawa³, Satoshi Mizuno¹, Hidekazu Nishigori¹, Nobuo Yaegashi¹

<sup>1</sup>Tohoku University, Japan, <sup>2</sup>Yamagata Prefectural Central Hospital, Japan, <sup>3</sup>Kagawa Nutrition University, Japan

# PS-01-p-229 A pilot cross-sectional study examining nutrient intakes of Chinese pregnant women in Hong Kong

Ruth Chan, Sin Li, Terence Lao, Mandy Sea, Jean Woo The Chinese University of Hong Kong, Hong Kong

# PS-01-p-230 Aggression and its associations with nutritional intake, life-styles and autonomic nervous system activity in school children

Maki Suzuki<sup>1</sup>, Keiko Otake<sup>2</sup>, Ikuyo Hayashi<sup>1</sup>, Toshio Moritani<sup>3</sup>, Narumi Nagai<sup>1</sup>

<sup>1</sup>University of Hyogo, Japan, <sup>2</sup>Kwansei Gakuin University, Japan, <sup>3</sup>Kyoto University, Japan

### **Program**

#### PS-01-p-231 TV viewing is associated with obesity in Thai children aged 7 to 12 years

Wiyada Thasanasuwan<sup>1</sup>, Kallaya Kijboonchoo<sup>1</sup>, Weerachat Srichan<sup>1</sup>, Uruwan Yamborisut<sup>1</sup>, Wanphen Wimonpeerapattana<sup>1</sup>, Nipa Rojroongwasinkul<sup>1</sup>, Paul Deurenberg<sup>2</sup>, Ilse Khouw<sup>3</sup>

<sup>1</sup>Mahidol University, Thailand, <sup>2</sup>Nutrition Consultant, Malaysia, <sup>3</sup>FrieslandCampina Development Centre AMEA,

Singapore

### PS-01-p-232 The impact of Maternal Cognitive on Screen Time (ST) behaviors of preschool children

Zhi Run Zhu<sup>1</sup>, Long Xiang Xu<sup>1</sup>, Xue Rui Bai<sup>1</sup>, Wenxi Xie<sup>1</sup>, Manoj Sharma<sup>2</sup>, Yong Zhao<sup>1</sup> Chongqing Medical University, China, <sup>2</sup>University of Cincinnati, USA

# PS-01-p-233 Feeding Practice during Transitional Period (6-8 Months) and Complementary Feeding Programs in Jonggat Sub-district, Central Lombok, West Nusa Tenggara, Indonesia

Karina R. Ekawidyani<sup>1,2</sup>, Lindawati Wibowo<sup>2</sup>, Lina Rospita<sup>2</sup>, Luh Ade A. Wiradnyani<sup>2</sup>, Manjilala Manjilala<sup>2,3</sup>, Sitha D. Putriani<sup>2</sup>, Ragil Marini<sup>2,4</sup>

<sup>1</sup>Bogor Agricultural University, Indonesia, <sup>2</sup>Southeast Asian Ministers of Education Organization-Research Centre for Food and Nutrition, <sup>3</sup>Health Polytechnic Makassar, <sup>4</sup>Muhammadiyah Prof. Dr. Hamka University

### PS-01-p-234 Micronutrient Status of Indonesian Children 0.5-12 Year of Age by Socioeconomic Status: Result of Seanuts 2011

Fitrah Ernawati<sup>1</sup>, Sandjaja Sandjaja<sup>1</sup>, Ilse Tan Khouw<sup>2</sup>

<sup>1</sup>MOH Indonesia, and SEANUTS Indonesian Team / Persatuan Ahli Gizi Indonesia, Indonesia, <sup>2</sup>Friesland Campina, the Netherlands

### PS-01-p-235 Usual Daily Milk Intake of Indonesian Children Using Multiple Source Method and Its Association with Double Burden Malnutrition

Eny Palupi<sup>1,2</sup>, Angelika Ploeger<sup>1</sup>, Ahmad Sulaeman<sup>2</sup>

<sup>1</sup>University of Kassel, Germany, <sup>2</sup>Bogor Agricultural University, Indonesia

### PS-01-p-236 Alterations In Body Composition And Metabolic Profile Among Malay Children And Adolescents In Kuala Lumpur

Yeow Nyin Ang<sup>1</sup>, Masaharu Kagawa<sup>2</sup>, Mahadir Ahmad<sup>1</sup>, Bee Koon Poh<sup>1</sup>
<sup>1</sup>Universiti Kebangsaan Malaysia, Malaysia, <sup>2</sup>Kagawa Nutrition University, Japan

#### PS-01-p-237 Adolescent Holds the Key to Saving Future Generation of Indonesia

Avita A Usfar<sup>1</sup>, Akhir Riyanti<sup>2</sup>

<sup>1</sup>TNP2K, Indonesia, <sup>2</sup>Universitas Indonesia, Indonesia

#### PS-01-p-238 Effectiveness of fortified milk on growth in young children: A systematic review and metaanalysis

Misa Matsuyama<sup>1,2,3</sup>, Peter S. W. Davies<sup>1,2,3</sup>, Tracy Harb<sup>1,2,3</sup>, Michael David<sup>1,2,4</sup>, Rebecca J. Hill<sup>1,2,3</sup>

<sup>1</sup>The University of Queensland, Australia, <sup>2</sup>Queensland Children's Medical Research Institute, Australia, <sup>3</sup>Children's Nutrition Research Centre, <sup>4</sup>School of Population Health

### PS-01-p-239 Association Between Birth Weight, Physical Status and Physical Fitness in University Students

Ryo Abe<sup>1</sup>, Wataru Aoi<sup>1</sup>, Masayo Iwasa<sup>1</sup>, Ayako Saruwatari<sup>1</sup>, Kiyomi Harada<sup>2</sup>, Sayori Wada<sup>1</sup>, Akane Higashi<sup>1</sup>

<sup>1</sup>Kyoto Prefectural University, Japan, <sup>2</sup>Kyoto Prefectural University of Medicine, Japan

# PS-01-p-240 Maternal leanness at the beginning of pregnancy affect the physique of infants (Longitudinal study)

Ayako Saruwatari¹, Yurika Tanaka¹, Kiyomi Harada¹,², Masayo Iwasa¹, Kiyoko Odani¹, Kayo Furutani¹, Yukari Nishi⁴, Sayuri Fukuda³, Akane Higashi¹

<sup>1</sup>Kyoto Prefectural University, Japan, <sup>2</sup>Kyoto Prefectural University of Medicine, Japan, <sup>3</sup>Kyoto Bunkyo Junior College, Japan, <sup>4</sup>Nagaokakyo City, Japan

### PS-01-p-241 Eicosapentaenoic acid may improve the impaired signaling pathway of the cardiac muscle of infants

Ritsuko Kawaharada<sup>1</sup>, Sayo Ichikawa<sup>1</sup>, Chisaki Kofude<sup>1</sup>, Miki Yajima<sup>1</sup>, Misa Muramoto<sup>1</sup>, Akio Nakamura<sup>2</sup> <sup>1</sup>Takasaki University, Japan, <sup>2</sup>Gunma University, Japan

#### PS-01-p-242 Risk Factors Associated with Mental Development

Harahap Heryudarini<sup>1,3</sup>, Budiman Basuki<sup>2,3</sup>, Sandjaja Sandjaja<sup>2,3</sup>, Syarief S Nurmeida<sup>3</sup>

<sup>1</sup>Riau Provincial Board of Reseach and Development, Indonesia, <sup>2</sup>Center for Applied Health Technology and Clinical Epidemiology, <sup>3</sup>Indonesian SEANUTS Team/Persatuan Ahli Gizi Indonesia, Indonesia



### PS-01-p-243 Influence of Dietary Intake on Cognitive Performance of Malaysian Children aged 6 months to 3 years: A Cross-sectional Study

Shoo Thien Lee<sup>1</sup>, Jyh Eiin Wong<sup>1</sup>, Safii Nik Shanita<sup>1</sup>, Lai Onn Ng<sup>2</sup>, Abd Talib Ruzita<sup>1</sup>, Abdul Karim Norimah<sup>1</sup>, Bee Koon Poh<sup>1,3</sup>

<sup>1</sup>Universiti Kebangsaan Malaysia, Malaysia, <sup>2</sup>Sunway University, Malaysia, <sup>3</sup>National Co-ordinator (Malaysia), the SEANUTS study group, Malaysia

### PS-01-p-244 Micronutrient Sprinkles Intervention Improved Growth of Indian Children Aged 6-18 Months

Jyoti Vijay, Sheel Sharma Banasthali University, India

#### PS-01-p-245 LC PUFA Consumption among Pregnant Women in Central Bogor, West Java, Indonesia

Renan P. Jenie<sup>1</sup>, Anies Irawati<sup>2</sup>, Salimar Salimar<sup>2</sup>

<sup>1</sup>Institut Pertanian Bogor, Indonesia, <sup>2</sup>National Institute of Health Research and Development, Indonesia

#### PS-01-p-246 Infant Feeding Practices - An Asian Perspective

Mary F-F. Chong<sup>1,5</sup>, Jia Ying Toh<sup>1,5</sup>, Grace E.H. Yip<sup>2</sup>, Wee Meng Han<sup>3</sup>, Doris N.L. Loh<sup>4</sup>, Yen Ling Low<sup>5</sup>, Yung Seng Lee<sup>1,5</sup>, Salome A. Rebello<sup>5</sup>, Seang Mei Saw<sup>5</sup>, Kenneth Kwek<sup>3</sup>, Keith M. Godfrey<sup>6</sup>, Peter D. Gluckman<sup>1,7</sup>, Yap Seng Chong<sup>1,5</sup>

<sup>1</sup>Singapore Institute for Clinical Sciences (SICS), Agency for Science, Technology and Research (A\*STAR), Singapore, <sup>2</sup>Nanyang Technological University, Singapore, <sup>3</sup>KK Women's and Children's Hospital, Singapore, <sup>4</sup>National University Health System, Singapore, <sup>5</sup>National University of Singapore, <sup>5</sup>University of Southampton & University Hospital Southampton NHS Foundation Trust, UK, <sup>7</sup>University of Auckland, New Zealand

#### PS-01-p-247 A study on the physical properties of baby food

Emiko Otsuka, Sonoko Ayabe

Takasaki University Health and Welfare, Japan

### PS-01-p-248 Maternal Social Capital and Nutritional Status of Children 6 to 24 Months Old in an Urban and Rural Area

Divine Grace Cas Domingo

University of the Philippines Los Banos, Philippines

### PM Nutrition Education/Community Nutrition 2

#### PS-01-p-249 Development of a Vietnamese University Curriculum Framework in Public Health Nutrition

Quynh T. H. Pham, Anthony Worsley, Mark Lawrence, Bernie Marshall, Sonia Brockington Deakin University, Australia

### PS-01-p-250 Knowledge and Perception on the Importance of Food Label were Associated to Food Label Use among University Students in Surabaya

Dini Ririn Andrias, Annis Catur Adi Universitas Airlangga, Indonesia

### PS-01-p-251 A Study on Health-related Lifestyle and Sweet Food Intake by Stress Levels in College Students in Seoul

Jun-Gyeong Kim, Seo-Rin Doo, Ga-Ram Kim, Seul Lee, Bo-Mi Kang, Hea-Ryun Park, Young-Mi Lee, Kyung-Hee Song

Myongji University, Korea

### PS-01-p-252 Effects of intervention based on The 3-1-2 Meal Box Magic for young female who had IGT

Namiko Adachi, Takayoshi Tsukahara Nagoya University of Arts and Siences, Japan

### PS-01-p-253 The consciousness of the younger generation of the rice consumption and the improvement of dietary habits

Taeko Shigenobu-Kishimoto

Okayama Prefectural University, Japan

#### PS-01-p-254 Consciousness of Salt Intake and Dietary Behavior in College Students in Japan

Jangmi Kang, Takuma Tanaka, Haruka Matsumoto

Hyogo NCC College, Japan

### PS-01-p-255 Can response execution/inhibition training change amounts of food intake at buffet style lunches?

Kimiko Kazami<sup>1,2</sup>, Masami Hara<sup>2</sup>, Hiromi Shiraishi<sup>1</sup>, Seigo Shiga<sup>2</sup>, Kentaro Yamanaka<sup>2</sup> <sup>1</sup>University of Human Arts and Sciences, Japan, <sup>2</sup>Showa Women's University, Japan

### PS-01-p-256 Examination of Factors Influencing the Dietary Behaviors of Female University Students Using "Theory of Planned Behavior"

Ikue Hamaguchi¹, Toyoko Okuda², Hayato Uchida³, Masayuki Hamaguchi⁴, Yuko Higashine⁵ ¹Konan Women's University, Japan, ²Tezukayamagakuin University, Japan, ³University of Hyogo, Japan, ⁴Osaka Prefecture University, Japan, ⁵Osaka Aoyama University, Japan

#### PS-01-p-257 A Study on Quality of Life (QOL) of University Students

Shoko Sasaki<sup>1</sup>, Yumi Tsuchiya<sup>2</sup>, Sumiko Kurata<sup>1</sup>
<sup>1</sup>Tokyo Kasei Gakuin University, Japan, <sup>2</sup>Nitobe Bunka College, Japan

# PS-01-p-258 Effectiveness of a practical dietary lifestyle education (PDLE) program for young female, Japan

Masako Arashi¹, Masako Yokotsuka², Satoru Iwai³, Mariko Watanabe⁴, Kazue Yamaoka⁵, Toshiro Tango⁵.⁶¹Sagami Women's University, Japan, ²Showa Women's University, Japan, ³Bunkyo University, Japan, ⁴Showa Women's University Graduate School, Japan, ⁵Teikyo University, Japan, ⁶Center for Medical Statistics, Japan

#### PS-01-p-259 Effects of dietary intervention on improvement of defecation in healthy female adults

Tomomi Ichikawa<sup>1</sup>, Tsubasa Matsumoto<sup>1</sup>, Ayako Asahi<sup>2</sup>

<sup>1</sup>Hiroshima Jogakuin University, Japan, <sup>2</sup>Himawari Dental Clinic, Japan

### PS-01-p-260 The changes of dietary fiber intakes in young people after supplementation resistant starch at their breakfast

Masako Tsuji¹, Yuko Sato³, Yuya Nagahata², Isao Kobayashi², Masaru Goto², Naotaka Hashizume³, Tamotsu Kuwata³

<sup>1</sup>Tokyo Kasei Gakuin University, Japan, <sup>2</sup>J-OIL MILLS INC., Japan, <sup>3</sup>University of Human Arts and Sciences, Japan

#### PS-01-p-261 Patterns of coping with the aftermath of dietary lapses in weight control

Misa Shimpo, Rie Akamatsu Ochanomizu University, Japan

### PS-01-p-262 Estimated urinary salt excretion by a self-monitoring device is applicable to education of salt restriction

Kenichiro Yasutake<sup>1</sup>, Noriko Horita<sup>2</sup>, Tomomi Kajiyama<sup>1</sup>, Munechika Enjoji<sup>3</sup>, Takuya Tsuchihashi<sup>4</sup>

<sup>1</sup>Nakamura Gakuen University, Japan, <sup>2</sup>Nishikyushu University, Japan, <sup>3</sup>Fukuoka University, Japan, <sup>4</sup>Steel Memorial Yawata Hospital, Japan

### PS-01-p-263 Thai community health care workers improvements in diabetes knowledge were not sufficient to change risk factors in community members

Kitti Sranacharoenpong Mahidol University, Thailand

## PS-01-p-264 Intake of a Japanese-style healthy lunch contributes to normalization of serum adipocytokine

Hiroko Inoue, Ryosuke Sasaki, Toshiko Kuwano University of Shizuoka, Japan

### PS-01-p-265 Comparison of Current Vegetable Intake and Recollections of Childhood Dietary Habits among Young Single Males

Misato Tanaka, Yukari Takemi Kagawa Nutrition University, Japan

### PS-01-p-266 The Effect of Nutrition Counseling Program on Children with Congenital Heart Disease

Chutikan Sakphisutthikul, Waraporn Chur-Inn KhonKaen University, Thailand

# PS-01-p-267 Developing an interactive nutrition diabetes education model for nutritional behavior change in type 2 diabetes patients

Ting-Wen Chia

Chung Shang Medical University Hospital, Taiwan

#### PS-01-p-268 Using Diabetes Conversation Map in Practice: a Regional Hospital Experience in Taiwan

Hsiao-Chun Lin, Chung-Mei Ouyang, Mei-Ling Hung, Yuh-Lin Liu, Ching Lu National Taiwan University Hospital, Taiwan



PS-01-p-269 Establishment of A National Web-Based Education and Counseling Program for Expanding Access to Promote Behaviour Change in Diabetics

Emyr R. Isaura

Taipei Medical University, Taiwan

PS-01-p-270 Nutrition Education Program to Improve Care Providers Nutrition Management for Disability Population in Rehabilitation Centres in Malaysia

Seong Ting Chen, Kah Leng Soo, Azriani Ab Rahman, Hans Van Rostenberghe, Sakinah Harith Universiti Sains Malaysia, Malaysia

PS-01-p-271 Misleading advertisements of "Food for Specified Health Uses" in Japan

Kuniko Takahashi Gunma University, Japan

PS-01-p-272 Development of a web application with Flash for nutrition education

Yumie Tomita<sup>1</sup>, Yuka Masshardt<sup>2</sup>, Reiko Hirasawa<sup>2</sup>, Toshikatsu Hosoi<sup>2</sup>, Jun Oka<sup>1</sup>, Kouichi Hirota<sup>2</sup> <sup>1</sup>Tokyo Kasei University, Japan, <sup>2</sup>National Institute of Health and Nutrition, Japan

PS-01-p-273 The Evaluation of Internet-Based Lectures to Improve Behavior of Eating and Exercise in Freshmen

Ying-Yueh Chu, Su-Yi Lin, Yi-Jhen Lin, Hsien-Yu Fan Chinese Culture University, Taiwan

PS-01-p-274 Relationship between users acquiring appropriate information about dietary advice on diabetes and websites' adherence to structural criteria

Reiko Hirasawa<sup>1</sup>, Sakiko Yoshizawa<sup>1</sup>, Chika Horikawa<sup>1,2</sup>, Yoko Ibe<sup>2</sup>, Yoriko Heianza<sup>1</sup>, Ayumi Hirose<sup>1</sup>, Yoko Yachi<sup>1,3</sup>, Kazuo Kondo<sup>4</sup>, Kaoruko Iida<sup>4</sup>, Hirohito Sone<sup>1</sup>

<sup>1</sup>Niigata University, Japan, <sup>2</sup>University of Tsukuba Institute of Clinical Medicine, Japan, <sup>3</sup>Yamanashi Gakuin University, Japan, <sup>4</sup>Ochanomizu University, Japan

PS-01-p-275 Characteristics of User of Indonesian Social Media Having Nutrition Education Programs

Septian Suhandono, Hardinsyah Hardinsyah

Food and Nutrition Society of Indonesia (PERGIZI PANGAN Indonesia), Indonesia

PS-01-p-276 The Impact of School-based Sport Nutrition Education Intervention on Nutrition Knowledge and Dietary Intake Variables Relating to Nutrition for Athletes

Setyo U Wisnusanti, Intan R Rahmawati, Ni'mah Hanifah, Chairina Vidya Universitas Gadjah Mada, Indonesia

PS-01-p-277 The influence of nutrition education intervention on energy nutrient intakes, body composition, and attention performance in Taiwanese young baseball players

Fu-Chun Tang, Sieh-Hwa Lin, Ting-Wei Wu, Yu-Ping Lu, Yi-Hsin Chen, Chi-Shiuan Wu, Shin-Han Peng, Fang-Ying Pan, Pin-Lun Lin, Yi-Zhen Chen

National Taiwan Normal University, Taiwan

PS-01-p-278 Examination of Effect of Practical Nutrition Education on University Male Long-distance Runners

Kinuyo Kanbe

Nihon University Junior College, Japan

PS-01-p-279 Transtheoretical Model is effective for nutrition education in young healthy athletes

Kanako Katai, Kitagawa Misaki, Kangawa Ayumi

Doshisha Women's college of Liberal Arts, Japan

**PM** 

### **Public Health Nutrition 2**

### PS-01-p-280 Assessing the Impact of Food Regulations in Singapore: A Content Analysis of F&B Advertising Landscape

Reidinar Juliane Wardoyo, May Lwin, Wonsun Shin, Hattie Liew, Yeo Su Lin Nanyang Technological University, Singapore

#### PS-01-p-281 Increasing the Cadres's Welfare

Eskaning Arum Pawestri University of Indonesia, Indonesia

#### PS-01-p-282 To Evaluate the Adherence of Enteral Formulas to DRIs in Taiwan

Barbara Ying Jung Chen<sup>1</sup>, Steve Ma<sup>2</sup>, Frances Chang Ma<sup>2</sup>

<sup>1</sup>Nutritec Enjoy Corporation, Taiwan, <sup>2</sup>Nutritec Enjoy Nutrition Center, Taiwan

### PS-01-p-283 Nutritional and behavioral determinants of childhood obesity: a case-control study in Sri Lanka

Senarath Mahamithawa<sup>1</sup>, Kumari M. Rathnayake<sup>2</sup>, R. Gajatheepan<sup>2</sup>, VP Wickramasighe<sup>3</sup>

<sup>1</sup>Ministry of Health, Public Health Complex, Sri Lanka, <sup>2</sup>Wayamba University of Sri Lanka, Sri Lanka, <sup>3</sup>University of Colombo, Sri Lanka

# PS-01-p-284 Stunting in India: Its association with the triad of feeding, care and environmental health Ashi Kohli Kathuria, John Lincoln Newman, Mohini Kak

World Bank, India

#### PS-01-p-285 Food security of migrants in a regional area of Australia A qualitative study

Joanne Sin Wei Yeoh<sup>1</sup>, Quynh Le<sup>2</sup>, Rosa Mcmanamey<sup>3</sup>
University of Tasmania, Australia

# PS-01-p-286 The role of dairy in helping Vietnamese children to meet their daily nutrient requirements: the South East Asian Nutrition Survey

Khanh Bao Le Nguyen<sup>1</sup>, Burgers Minke<sup>1</sup>, Tuyen Danh Le<sup>1</sup>, Chinh Huu Nguyen<sup>1</sup>, Truong Hong Nguyen<sup>1</sup>, Deurenberg Paul<sup>2</sup>, Khouw Tan Ilse<sup>3</sup>

<sup>1</sup>National Institute of Nutrition (NIN), Viet Nam, <sup>2</sup>Nutritional Consultant, <sup>3</sup>FC Company,

### PS-01-p-287 Study on Application of Fatty Acids and Its Alkali Salts for the Biocontrol of Acanthamoeba

Manami Masuda<sup>1</sup>, Mariko Era<sup>1</sup>, Takayoshi Kawahara<sup>2</sup>, Takahide Kanyama<sup>2</sup>, Hiroshi Morita<sup>1</sup> The University of Kitakyusyu, Japan, <sup>2</sup>Shabondama Soap Co., Ltd., Japan

#### PS-01-p-288 Application to the toxic inspection to the food additive of Allivibrio fischeri

Chinatsu Nagahama<sup>1</sup>, Hitomi Kuwahara<sup>1</sup>, Junko Ninomiya<sup>1</sup>, Hiroshi Morita<sup>2</sup> The University of Kitakyushu, Japan

# PS-01-p-289 The Effects of Fatty Acid Salts Against Cladosporium Cladosprioides and Dermatophagoides Farinae

Yui Okuno<sup>1</sup>, Mariko Era<sup>1</sup>, Takayoshi Kawahara<sup>2</sup>, Takahide Kanyama<sup>2</sup>, Hiroshi Morita<sup>1</sup> <sup>1</sup>The University of Kitakyushu, Japan, <sup>2</sup>Shabondama Soap Co., Ltd., Japan

### PS-01-p-290 Acceptance and Nutritional Potency of Wild Food Plants for Improvement of Community Diet in Food Insecure Area

Annis Catur Adi, Dini Ririn Andrias Universitas Airlangga, Indonesia

### PS-01-p-291 High prevalence of malnutrition among adult women and children in food insecure rural households

Thamilini Joshepkumar, Renuka Silva, Udith Jayasinghe Wayamba University of Sri Lanka, Sri Lanka

# PS-01-p-292 Factors and Consequences of Food Insecurity among Welfare Recipients in Bangi And Kajang, Selangor Malaysia

Norhasmah Sulaiman

Universiti Putra Malaysia, Malaysia

# PS-01-p-293 Correlation of Socio Economic Status (SES) with Perceived Food Accessibility based on HFIAS in Three Different Areas of Indonesia

Nia Novita Wirawan<sup>1</sup>, Hasan La Kabolosi<sup>2</sup>, Ratna Chrismiari Purwestri<sup>3</sup>, Gemala Qurbani<sup>1</sup>, Devilia Mega<sup>1</sup> <sup>1</sup>University of Brawijaya, Indonesia, <sup>2</sup>Health Polytechnic of Kendari, Indonesia, <sup>3</sup>University of Hohenheim, Germany



#### PS-01-p-294 Effect of Chitosan Silkworm Pupae Skin Subtitution of Formalin toward Storability of Tofu

Taufiq Firdaus Alghifari Atmadja<sup>1</sup>, Clara M Kusharto<sup>2</sup>, Pipih Suptijah<sup>3</sup>

<sup>1</sup>Taufiq Firdaus Alghifari Atmadja University, Indonesia, <sup>2</sup>Clara M. Kusharto University, Indonesia, <sup>3</sup>Pipih Suptijah University, Indonesia

### PS-01-p-295 Molecular mechanistic study of virulence factors related to biofilm formation of Enterococcus faecalis

Yen-Jou Hsu, Su-Hua Huang Asia University, Taiwan

### May 16 (Saturday)

#### **Poster Session 02**

#### AM Nutritional Biochemistry 3

### PS-02-a-001 The effect of different sources of n-3 fatty acids on lipid metabolism and body fat in ovariectomized rat

Wan-Chun Chiu<sup>1</sup>, Yen-Shou Chiu<sup>1,2</sup>, Chi-Chang Huang<sup>2</sup>, Pei-Hsuan Li<sup>1</sup>
<sup>1</sup>Taipei Medical University, Taiwan, <sup>2</sup>National Taiwan Sport University, Taiwan

#### PS-02-a-002 Inhibition of leukocyte-type 12-lipoxygenase activity by Chinese tea

Yoshiko Mori<sup>1</sup>, Akemi Otsuki<sup>1</sup>, Shuji Okochi<sup>1</sup>, Kensuke Okamoto<sup>1</sup>, Yuki Kawakami<sup>1</sup>, Toshiko Suzuki-Yamamoto<sup>1</sup>, Yamashita Hiromi<sup>1</sup>, Kimoto Masumi<sup>1</sup>, Hideaki Tsuji<sup>1</sup>, Hideyuki Ito<sup>1</sup>, Ding Zhi Fang<sup>2</sup>, Yoshitaka Takahashi<sup>1</sup>

1 Okayama Prefectural University, Japan, 2 Sichuan University, China

### PS-02-a-003 Influence of conjugated linoleic acid on erythrocyte deformability of rats fed with high fat diets at different caloric intakes

Hong-Jen Liang<sup>1</sup>, Mei-Chun Yeh<sup>1</sup>, Jia-Cheng Chang<sup>1</sup>, Teruyoshi Yanagita<sup>2</sup>

<sup>1</sup>Yuanpei University of Medical Techology, Taiwan, <sup>2</sup>Nishikyushu University, Japan

### PS-02-a-004 Caffeine stimulates protein degradation systems and inhibits muscle hypertrophy in skeletal muscle cells

Tatsuro Egawa, Yoshitaka Ohno, Shingo Yokoyama, Miho Suzuki-Takuwa, Akihiro Ikuta, Ayumi Goto, Katsumasa Goto

#### Toyohashi SOZO University, Japan

### PS-02-a-005 Amino acids have effects on the inflammatory state and the barrier function in human intestinal epithelial Caco-2 monolayers

Hiroyuki Kuzuoka, Norifumi Sato EN Otsuka Pharmaceutical Co., Ltd., Japan

# PS-02-a-006 Effect of dietary ornithine on the nerve growth factor and the choline acetyltransferase in the brain regions in aged rats

Kazuyo Tujioka<sup>1</sup>, Takashi Yamada<sup>2</sup>, Hidehiko Yokogoshi<sup>2</sup>, Saori Akiduki<sup>3</sup>, Yukihiro Hishida<sup>3</sup>, Kazutoshi Hayase<sup>4</sup>

<sup>1</sup>Ohkagakuen University, Japan, <sup>2</sup>Chubu University, Japan, <sup>3</sup>KYOWA HAKKO BIO CO., LTD, Japan, <sup>4</sup>Aichi University of Education, Japan

### PS-02-a-007 Structure-function analysis of NAD(P)H-dependent carbonyl reductase specifically expressed in thyroidectomized(Tx) chicken fatty liver

Yudai Fukuda<sup>1</sup>, Takeki Sone<sup>1</sup>, Tomohiro Araki<sup>1</sup>, Takahiro Niki<sup>1</sup>, Haruhiko Sakuraba<sup>2</sup>, Toshihisa Ohshima<sup>3</sup>, Takeshi Shibata<sup>1</sup>, Kazunari Yoneda<sup>1</sup>

<sup>1</sup>Tokai University, Japan, <sup>2</sup>Kagawa University, Japan, <sup>3</sup>Osaka Institute of Technology, Japan

### PS-02-a-008 Ten amino acids inhibit kynurenic acid formation via suppressing kynurenine uptake or kynurenic acid synthesis in rat brain in vitro

Airi Sekine, Misaki Okamoto, Yuka Kanatani, Mitsue Sano, Katsumi Shibata, Tsutomu Fukuwatari University of Shiga Prefecture, Japan

# PS-02-a-009 The examination of clinical picture of hypo-aminoacidemia in Japanese health check-up subjects

Hiroko Jinzu<sup>1</sup>, Kenji Nagao<sup>1</sup>, Takayuki Tanaka<sup>1</sup>, Akira Imaizumi<sup>1</sup>, Hiroshi Yamamoto<sup>1</sup>, Akiko Toda<sup>2</sup>, Mizuki Tani<sup>2</sup>, Yuko Ishizaka<sup>2</sup>, Minoru Yamakado<sup>2</sup>

<sup>1</sup>Ajinomoto Co., Inc., Japan, <sup>2</sup>Mitsui Memorial Hospital, Japan