

# Asia Pacific Clinical Nutrition Society

## Award for 2007

### Professor Duo Li

MB (Lanzhou), MSc (Tasmania), PhD (RMIT)



Duo Li is a Professor of Nutrition and Food Safety in the Department of Food Science and Nutrition, College of Biosystem Engineering and Food Science at Zhejiang University in Hangzhou, China. He is the current Director of the Nutrition and Food Safety Center of the Asia Pacific Clinical Nutrition Society, and is a Deputy Director of the Food Science Institute, Zhejiang University. Duo Li was born on 2<sup>nd</sup> March 1958 in Tianshui, Gansu Province, China, but has since become an Australian citizen, and also a China permanent resident. After he gained a Bachelor's Degree in Medicine (Lanzhou University, China) in 1982, he taught pharmacology in Wudu Health School, Gansu Province, and Beijing Medical College for Medical professionals, China. He was a Visiting Researcher at the School of Pharmacy, University of Tasmania from 1989-1990. He completed both his MSc (University of Tasmania, Hobart) and PhD in Nutrition and Food Science (RMIT University, Melbourne) in Australia. He was also a research fellow at Deakin University, and a senior research fellow at RMIT University in Melbourne.

He is a co-editor of the Asia Pacific Journal of Clinical Nutrition, and has also served on numerous editorial boards including the Mahasarakham Journal of Science and Technology, Health Review, China Healthcare & Nutrition, and China Food & Nutrition. He is a member of the, Asia Pacific Clinical Nutrition Society, the Nutrition Society of Australia, the Nutrition Society of China, the Chinese Institute of Food Science and Technology, and the American Oil Chemists Society.

He has served on numerous government boards. He has been a fellow of China National Food and Nutrition Consultation Committee, a Standing committee member of the China Food Safety Consultation Committee, and a member of the Zhejiang Food Safety Experts Consultation Committee. He is currently the Director of the Ethics Committee and a member of the Scientific Board, College of Biosystem Engineering and Food Science, Zhejiang University.

Duo Li discoveries have been largely in the field of lipid nutrition and metabolism. Amongst them he has found that (1) arachidonic acid is present in animal lipocytes, (2) increased dietary intake of clupanodonic acid (22:5n-3) results in reduced platelet volume, (3) vegetarians may have increased platelet activity caused by low dietary n-3 polyunsaturated fatty acid intake, (4) long-term n-3 fatty acid deficiency leads to an increased plasma homocysteine level, (5) metabolism of arachidonic acid can be suppressed by dietary animal fat intake, (6) high meat intake will lead to an increased tissue stearic level, later associated with an increased plasma coagulation factor VII activity. He first reported that (1) 16:3n-3 was found in green vegetables, (2) alpha-linolenic acid and linoleic acid have equivalent effects in reducing blood cholesterol, (3) stearic acid from plants and animals have different effect on blood and lipoprotein lipids, which may be caused by the arrangement of stearic acid and other fatty acids in plants and animal fats among the three available etherification sites present on the backbone of TAG molecules and on other components which are present in fats.

Duo received an Award for the Promotion of Student Nutrition and Health Tasks in 2004 in China; Australian Postgraduate Awards in 1995, 1996 and 1997; a Zhejiang Science and Technology System award from the Science and Technology Association, Zhejiang Province, China; 1<sup>st</sup> Prize in Natural Science for the paper: "Relationship between platelet phospholipid fatty acid and mean platelet volume in healthy men", Academic Committee of Natural Science, Zhejiang Province, China.

He has organized or chaired various international scientific conferences such as the International Symposium on the Evolution of Food Safety and Nutrition, in October 2002, in Hangzhou, China; the Joint ZAST/IUNS/WHO workshop on "Current Patterns and Emerging Challenges of Nutrition cuisine and health", in October 2003, Hangzhou, China; and the Joint International Clinical Nutrition Conference of the International Union of Nutritional Science (8<sup>th</sup> ISCN-IUNS) and the Asia Pacific Clinical Nutrition Society (5<sup>th</sup> APCNS), in Oct 2006, Hangzhou, China.

Duo has published more than 150 scientific papers and several books or book chapters. His supervision of many PhD and Masters Students has increased the capacity of young nutrition investigators in Asia. His research group has integrated research themes on nutrition and food safety in some five areas. The first is food bioactivity (anti-inflammation, anti-diabetes, anti-hypertension, anti-cancer, hypo-blood lipids etc) using whole foods, food ingredients, natural products, foods for health and functional foods, through *in vitro studies*, animal models and human clinical trials. The secondly is food safety evaluation, with an emphasis on the long term safety of foods. Third, the relationship between non-communicable diseases and habitual dietary intake. The fourth area is the evaluation of novel food and potential natural nutrient resources, through compositional and physiological studies. Finally, his work examines how nutrients, food ingredients and natural products influence the expression of select genes.

His commitment to nutrition scholarship and capacity building in the Asia Pacific region make him a most worthy recipient of the Asia Pacific Clinical Nutrition Society Award in 2007.

**Widjaja Lukito MD PhD**  
Immediate Past President APCNS