



# **REPORT**

## **IUNS-CNS**

## Nutrition Leadership Training Workshop

at Zhejiang University and Fudan University

6th-9th June 2008

### A Joint Project Initiated by IUNS and Supported by CNS

**Convened by** Professor Mark L Wahlqvist, Immediate Past President of IUNS, and Professor Keyou Ge, President of Chinese Nutrition Society

**Organized By:** International Union of Nutritional Science

Chinese Nutrition Society

**Supported by:** Zhejiang University Fudan University

**Sponsored by:** 

International Union of Nutritional Science Chinese Nutrition Society Nutricia Zheda Nutrease Healthy Tech Faculty of Biosystem Engineering and Food Science, Zhejiang University

#### **Organizing team:**

Mark L Wahlqvist	(Co-Convenor)
Keyou Ge	(Co-Convenor)
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## CONTENT

Summery of the workshop	4
Program	9
Mentor/Senior Nutritionist lists	16
Trainee lists	17
Questionnaire	20

### **IUNS-CNS** Nutrition Leadership Training Workshop

## Summery of the workshop

**Background:** Two years ago I proposed the idea of the Young Chinese Nutrition Leadership Training Workshop to Mark, to which Mark responded positively with a yes. The preparation was started in Oct 2007 while Mark was visiting Zhejiang University. The preparation accelerated after Mark discussed the workshop with Prof Ricardo Uauy, President of IUNS, and after I further discussed it with Prof Uauy in Shanghai on  $6^{th}$  - $7^{th}$  December 2007. There was strong support from Prof Keyou Ge, President of Chniese Nutrition Society, when Mark discussed the workshop with him. Valuable comments and support were provided by Prof Junshi Chen and Madam Chunming Chen. Workshop venues and dates were then confirmed to be Zhejiang University, Hangzhou and Huadong Hospital, Shanghai on  $6^{th}$  -  $9^{th}$  June 2008. Fifteen mentors (one from Australia, Korea and USA, and three from Taiwan) and 44 trainees (from 26 provinces and cities directly under the jurisdiction of central government including 6 trainees from Taiwan) participated in the workshop. The workshop was formally opened at 8.30am on  $6^{th}$  June 2008. Prof Mark L Wahlqvist and Prof Keyou Ge made brief speeches on behalf IUNS and CNS, respectively.

What is leadership and why does nutrition need it? Prof Mark L Wahlqvist quoted a line from Theodore Hesburgh, President of the University of Notre Dame: "The very essence of leadership is that you have to have a vision. It's got to be a vision you articulate clearly and forcefully on every occasion." A leader should be ethical, informed, capable of role devolution and organisationally or institutionally-directed. A leader should have vision, integrity, courage and good judgment, the capacity to decide and persuade, fortitude, authority, and be able to inspire confidence in others. Prof Hee Young Paik, Council Member of IUNS, presented on behalf of IUNS, addressed the elements of leadership from the IUNS point of view. She also introduced mission, task forces and regional networking. Prof Keyou Ge shared fundamental principles from his more than 40 year experiences as a leader, with respect to managing affairs and achieving goals successfully. A leader should understand central and local government policies and regulations that are related to food and nutrition issues, and should be veracious and sensitive to the demands of various sectors. Keyou also imparted tips on how to deal with partners, consumers, higher authorities and staff.

**Nutrition Publications**: Two lectures were delivered in this session. "If it's not written, it's not research". Prof Jingfan Gu introduced the requirements ACTA Nutrimenta SINICA, what's the requirements. Prof Gu summarized the common mistakes and errors that were found in manuscripts from his more than 25 years experience as an Editor-in-Chief of ACTA Nutrimenta SINICA. Prof Duo Li introduced Asia Pacific Journal of Clinical Nutrition, and how to draft a SCI manuscript. Most importantly, the editor, examiners and readers need to be assured the author has an in depth understanding of the chosen area. The authors should always keep in mind your paper is written for the reader, and they must understand what is being communicated. Scientific papers differ from fictional novels; a good novel allows the reader to explore possibilities with their own imagination. However, a good paper is logical, easy to understand, and well defined. Acceptance of a paper is dependent on three factors: novelty, significance and presentation (writing, conciseness and depth).

**Inter-institution cooperation and social mobilization:** Mr Jianbin Jia, executive secretary of CNS, addressed this issue. As a leader, the most important skill is to have outstanding communication both internally and externally. The public relations is to continually

communicate and exchanging information with the media, government and service objects in order to realize good dissemination results and brand effect. Next, a leader must have the ability to lead the team or agency to execute a project and to resolve problems. The essence of public relations lies in the handling of uncontrolled events at any time. A leader must also have good ability in expressing themselves in writing. The main purpose of public relations is to find common ground between media and customer demand so as to maximize the result of dissemination results.

The Future of Nutrition Science: Prof Mark Wahlqvist addressed this issue from a global point of view, emphasizing the future of nutritional science with respect to economic development and prosperity, human health, environment, education, dignity and happiness, and the sustainability of our planet. Emphasis should be made on the alleviation of poverty and hunger, and prevention of transitional chronic diseases such as obesity, diabetes, cardiovascular disease, certain cancers, osteoporosis and degenerative joint disease which appear to be relevant to dietary quality, often due to recognised nutritional deficiencies with varying degrees of essentiality, like phytonutrients, which underscore the value of plant-based diets. Dr Pao-Hwa Lin addressed that in the United States, as in any developed country, an ever increasing effort has been devoted in recent years to improve health through nutrition. Such efforts are mainly derived through nutrition research, professional education, public health policy, and public education. As China continues to grow economically and become more globalized, it is facing similar challenges in nutrition and health as countries like the United States. Further, China's rapid transition from a traditional Eastern to a Westernized lifestyle presents a unique opportunity to study the etiology of many diseases. Thus, the United State's experience in the development of nutrition science can and should serve as an important learning tool for the Chinese nutrition science communities.

**PhD Research:** Prof Duo Li addressed this issue based on his experience. The objective of PhD research was to cultivate independent researchers. An independent researcher should have the capability to conduct a research project by himself/herself, which includes project design, funding application, laboratory work, data collection, data analysis, reporting of information and article preparation. He also detailed the responsibility of a PhD supervisor. As a PhD candidate, you should make start from the searching and reading literatures, it is the most important skill for a PhD candidate, however, most candidates are having trouble when faced with hundreds of papers and extracting relevant information from them. A step by step process of how to read article, how to extract and summarise information were discussed.

**Translational Nutrition Science: Action Oriented:** Prof Junshi Chen addressed the application of NaFeEDTA fortified soy sauce in the control of iron deficiency and iron deficient anemia in China as a typical example of New Nutritional Sciences in practice. Prof Chen reported on how NaFeEDTA fortified soy sauce project was conducted, and how different social forces such as government agencies, central and local CDC, associations, sanitary control organizations, media, enterprises, marketing and consumers were mobilized and collaborated in the past five years. This success example was a result of different disciplines such as nutrition, food science and technology, economy, medicine, public health, biology and chemistry etc joining forces to achieve a common goal. Prof Mark L Wahlqvist made additional remarks about New Nutritional Science, which encompasses social, economic, political and human rights elements of nutrition. It is a biological, social and environmental science, which includes but is not limited to current conventional discipline. It emphasizes an integrated and comprehensive approach to solve nutrition problems.

Evidence Based Nutrition, World Cancer Research Fund report: Prof Junshi Chen and Prof Mark L Wahlqvist addressed that Evidence-based nutrition (EBN) has gained currency as part of the growing role of evidence-based medicine (EBM) to increase the validity, utility and cost-effectiveness of both clinical practice and, increasingly, public health endeavours. The most substantial and rigorous reports about diet and cancer in recent years have emanated from the combined efforts of the World Cancer Research Fund and American Institute for Cancer Research. The second report was launched simultaneously in London, Washington DC, Beijing and Hong Kong. The most consequential new state of EBN is the convincing evidence showing increased risk of cancers associated with body fatness, namely oesophagus (adenocarcinoma), pancreas, colorectum, postmenopausal breast, endometrium and kidney cancer. Where obesity is becoming an epidemic, this has profound policy significance. Most cancer is a disease of genes influenced by the environment. Therefore avoiding current adverse cancer trends depends on environmental interventions, especially those associated with substance abuse (such as tobacco and alcohol), sexual activity, physical activity and food intake, along with the need for healthy environments. The evidence increases is growing for a largely plant-based diet with limited intake of meat and meat products. For the moment, the evidence for cancer prevention suggests consumption of a variety of different fruits and vegetables, although some like the allium family, may have a particular role.

Scenario planning and policy development of food and nutrition: Prof Xiaoguang Yang addressed that health is the foundation and science is the evidence, closely combine with practice, and emphasize on feasibility and operability. The results of 2002 Chinese Nutrition and Health Survey showed that dietary pattern changed, physical activities decreased, the prevalence rate of overweight and obesity, hypertension and other chronic diseases increased significantly in recent 20 years. Controlling weight and measuring blood pressure has been settled as prevention strategy, since they are easier to be accepted and executed compared with many chronic diseases related factors. To achieve the goal, we need to get support from the central and local governments, to establish an "entire people healthy lifestyle action", to establish community health service system of chronic disease prevention and control, performing specification and framework (technology service of disease control system and function of monitoring and evaluating). To determine the general scheme, for example, "Health one-two-one" action that walking 10,000 steps everyday, balancing diet and sport, being healthy in a whole life, taking reasonable diet and regular exercise as start, advocating and transmitting a healthy lifestyle concept, promoting technical methods and supporting tools, developing entire civil participated activities. By the end of 2007, six provinces, autonomous regions and municipalities as first lot have demonstrated "Health one-two-one", supported by National Action Office. By the end of 2008, 50 percent of the provinces, autonomous regions, and municipalities will carry out it. By the end of 2015, entire nation will take the actions of "Health one-two-one" in different manners.

**Nutrition Research Project Management:** Prof Yingyong Cheng, Vice-President of CNS, addressed that initiative and efficiency of nutrition research depends not only on administration of national organization and planning, but also on the administration of Universities, research institutes, as well as root-level scientific unit or individual researchers. Therefore, the studies on the experience of nutrition research management in related institutions, such as research institute universities and colleges, are of paramount importance to perfecting the administration of, and enhancing the research efficiency of nutrition research institutions. Nutrition research management constitutes a gigantic system-engineering project. It involves not only the establishment of research programs, but also creating research plans, selecting research topics, examination and execution of a research proposal, and documenting

research results and evaluation and research data filing. They also involve the initiation, training, and employment of researchers, the handling of research information, and the management of research facilities. The administration of research personnel and the selection of research topics are two dynamic factors which are the focus in nutrition research administration.

What is Clinical Nutrition? Prof Mark L Wahlqvist and Prof Jianqin Sun addressed this issue from an international and China perspective, respectively. Clinical Nutrition is the application of food and nutrition science to individual health through prevention on the basis of risk analysis, diagnosis of nutritionally-related or dependent problems and/or nutritional care and management. It embraces all age groups, and is particularly relevant during pregnancy, lactation and early childhood. It is dependent on an understanding of nutritional epidemiology where one practices and on probability analysis of the likelihood of nutritional as opposed to non-nutritional factors which contribute to a possible nutritionally-related disorder or disease (NRD). Virtually any body tissue or system may be affected with an NRD. Revisions in the understanding of the mechanisms of disease, especially in regard to nutritional determinants of gene expression, the nutritional modulation of inflammation, nano-nutrition (especially pollutants) and medicine, and nutritional epi-genetics are re-conceptualising clinical nutrition. Nutritional diagnosis depends on the informed awareness of the nutritional possibilities, nutritional assessment skills in regard to food and nutrient intake, indices of growth and body composition and appropriate laboratory investigations which may be of nutritional function and physiology, biochemistry, haematology and immunology. Nutritional management strategies are a multidisciplinary and collaborative approach involving psycho-social and biomedical principles.

Building Multisectoral Dietetic Careers with Leadership: Prof Jingfan Gu and Dr Frances Ma discussed nutritionist and dietitian, how to play multisectoral roles. In the early twentieth century, the study of nutrition was directed towards social poverty and malnutrition; therefore, the focus of nutrition education was to increase energy and protein intake rather than to improve the nutritional quality of diet. By the late twentieth century, as society progressed and living standards improved, nutrition studies turned from under-nutrition to over-nutrition, called 'double burden of disease' which required a better understanding of dietary quality and of "optimal nutrition". Thus, the focuses of nutrition education became how-to select appropriate diets, understanding "not only what people ate, but why people eat what they ate" and the promotion of healthy lifestyles. In the twenty-first century, as society confronts the new and increasing challenges of ageing populations, complex socio-economic, cultural and demographic structures like the 'M-society' and global food scarcity, the focus of nutrition education will have to adjust accordingly. Today, people can easily access a vast amount of nutrition information. The role of nutritionists is primarily to help people differentiate and obtain reliable and meaningful information. A dietitian should know how to apply behavioral theories to guide people's dietary behaviors and habits. The role of a dietitian, which is characterized by skills to work with individuals as well as institutions, needs to expand beyond clinical nutrition and hospital food service into multiple sectors, such as catering, counseling, consulting, media, NGO/NPO and the community-at-large. The skill set of a dietitian needs to be diverse. With dietetic work-forces being relatively scarce in relation their demand, they need to have leadership qualities for and beyond their profession.

**Creating a Chinese-Speaking Nutrition Leadership Network:** Prof Keyou Ge and Prof Bonnie Sun Pan chaired this session. Health concern increases with affluence, thus the role of nutritionists is becoming more recognized in the Chinese-speaking society. The service of

nutritionists encompasses diet planning, counseling, nutrition education and strategic planning for those who have diet-restrictions and high health-risk populations. The goal of all nutritionists is to encourage people to eat healthy and thereby live happily. If the nutritionists, in addition to their professional requirements, can enhance their appreciation of the modern food science and technology, food materials prepared from agricultural, fisheries and animal husbandry, risk and benefits of food additives, chemical residues and biological risk detection and control, CAS, GMP, HACCP and processing technology improvements, the nutritionists will have a better understanding of food, provide alternatives in diet design, achieve higher efficiency,safety and quality in food preparation, and better accuracy in information provision to allow for a larger scope of service. To achieve these, a Chinese-speaking nutrition leadership network needs to be created urgently. Dr Yangfang Wang made remarks in relation to nutrition study on the issues of ethics, consent form and copyright, she enumerated numerous torts which were exposed to the public in recent years. This is very important and useful information for young leaders.

Eminent Nutrition Scientist: Dr Pao-Hwa Lin, from Duke University Medical Center, a coordinator of Dietary Approaches to Stop Hypertension (DASH) study, spoke about how this big national project was managed. DASH study was designed to examine the impact of dietary pattern on blood pressure using a controlled feeding protocol. This dietary pattern mimics a plant-based diet rich in fruits, vegetables, low fat dairy products, and low in meats and sugar sweetened products. The resultant nutrient pattern was high in potassium, magnesium, calcium, fiber and low in total, saturated fats and cholesterol. This DASH study proved that a change in dietary pattern was significantly effective in lowering blood pressure without restricting sodium intake, and lowering body weight among those with pre-hypertension and stage 1 hypertension. This finding was confirmed in the subsequent DASH-Sodium clinical trial which also demonstrated the additive benefit of lowering sodium intake while consuming the DASH dietary pattern. The significant findings from these two clinical trials eventually led to the subsequent lifestyle intervention trials (PREMIER and Weight Loss Maintenance) in testing the feasibility and adherence of adopting the DASH dietary pattern in a free-living situation. In 2003, the DASH dietary pattern was incorporated in the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNC7) established by the National Institute of Health (NIH) and the Dietary Guidelines for Americans established by the U.S. Department of Health and Human Services (HHS) and the Department of Agriculture (USDA) in 2005. This report demonstrates the possibility of how nutrition science can impact health from a laboratory setting to the level of public policy.

Seven young trainees made brief introductions about their education and where they work, what they work for, how they work, challenges and expectations. The Workshop ended with awarding of certificates of the IUNS-CNS Nutrition Leadership Training Workshop. It was a very successful workshop, all mentors and trainees participated from opening to closing. Every young trainee completed a questionnaire, principally every trainee was satisfy with this unique workshop, especially with the 1:3 arrangement, i.e. one mentor looking after three trainees. Based on the feedback, we will modify the program accordingly for next year's workshop. A Chinese Young Nutritionists network has been established including a web-site which has all the powerpoint presentations, photos, references and related materials from the workshop.

Duo Li Coordinator

## IUNS-CNS Nutrition Leadership Training Workshop

## Questionnaire

Thirty-eight of 44 young trainees have completed "Questionnaire", we have summarized the comments and suggestions are as follows:

#### 1. What's your view and comments for the workshop format?

- To increase communication between trainees and mentors
- To increase noon break time
- Workshop should conduct regularly
- Workshop is better to be held in one city, not two

#### 2. What's your view and comments for the workshop content?

- It should add how to apply funding and how to draft a grant application
- To increase scene tutorial and visit
- To increase group discussion
- **3.** Do you think which part(s) we should be strengthened and supplemented, which part(s) we should diminish and delete?
  - To increase pragmatic skill and experience
  - To add a session about how dietitian/nutritionist to communicate with patient
  - To upload mentor's ppt to the web-site prior workshop.

#### 4. What's your view and comments for the workshop teaching materials?

- Teaching materials should has a content
- Mentor's ppt should have both English and Chinese language
- To unify mother board, background should be simplified

## 5. What's your suggested city and month for next workshop, and which month do you prefer?

- More people suggested that next workshop should be held in a North-West city.
- To adapt an invitation for bid to decide the host city
- To get out of entry examination period of tertiary education
- To choice a spot where nutrition survey/intervention been conducting

#### 6. Others?

- To consummate organizing committee
- The workshop should be continue
- To establish a long-term connecting network, mentor should track and guide trainees irregularly

Duo Li Coordinator