

Meeting Report: 18TH INTERNATIONAL CONGRESS OF NUTRITION HELD IN DURBAN, SOUTH AFRICA

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18th International Congress of Nutrition (ICN), the quadrennial gathering of the International Union on Nutritional Sciences, was held at the International Conference Center in Durban in the province of KwaZulu-Natal, South Africa, over the period from Monday, September 19th through Friday, September 23rd, 2005. The general theme was "*Nutrition Safari for Innovative Solutions.*" The setting in southern Africa allowed the IUNS Council and the local organizers to project and highlight a conscious and comprehensive concentration on issues of this continent. The meeting concluded the 4-year (2001-2005) presidency of **Prof Mark Wahlqvist** of Australia and initiated the that of **Prof Ricardo Uauy** of Chile (2005-2009), leading up to the next ICN in Bangkok, Thailand. A new group of IUNS Officers and Councilors, representing each of the geographical regions of the globe, was elected by the Assembly, which also chose Granada, Spain as the venue for the 20th ICN in 2013.

In order for visitors to get a better appreciation of the African countryside and its natural wonders, a number of pre-Congress satellite meetings were convened in various settings across the Republic of South Africa, some of them in game parks and wildlife preserves during the weekend leading up to the main events in Durban. On Monday, September 19, which also served as registration day for the Congress, a total of 10 full-day or half-day workshops were offered. Of particular interest to the readership of this *Newsletter*, for their emphasis on micronutrients and bioactive dietary constituents, were the following offerings: *Nutrition and cognition*; *Food-based approaches to combating*

micronutrient deficiencies in children of developing countries; International workshop on fruit and vegetable consumption for health and nutrition; and Cocoa flavanoids and cardiovascular health: Translating fundamental science into nutritional action.

The heart of the Scientific Program had three components: 1. the **plenary series**, a total of 11 plenary sessions with 22 lecturers (1. Responding to the HIV/AIDS pandemic with evidence-based nutrition interventions; 2. Global strategy to prevent non-communicable diseases; 3. Poverty and food and nutrition security; 4. Nutrition science and food policy according to new principles; 5. Ecnutrition: Safe and sustainable food supplies; 6. the role of polyphenols in health and disease; 7. Nutrigenomics; 8. Evidence-based nutrition; 9. Nutrition in transition; 10. Process for the assessment of scientific support for claims on foods; and 11. Nutrition in children -- an investment in human capital); 2. the **pathway symposia** (P1, Global and international nutrition and new developments; P2, Micronutrients; P3, Non-communicable diseases; P4, Nutrition interventions; P5a, Immunology, HIV/AIDS and nutrition, P5b, Nutrition status assessment; P6, Nutrition support, cancer, the GI system and nutrient requirements; P7, Nutrition through the life cycle; P8, Indigenous foods, functional foods and safe foods); and 3. the **poster program**, similarly organized around the same pathway cluster system.

In addition, a total of three memorial sessions and five awards ceremonies complemented the program. Among the former, sessions were dedicated to honoring the memory of three distinguished investigators, deceased during 2004: 1. **Prof. Peter Fürst** of Germany; 2. **Prof. Vernon R. Young** of the USA; and 3. **Prof. Clive E. West** of the Netherlands. **Prof. West** had been a long-time Contributing Editor for the *Sight & Life Newsletter*.

The E.V. McCollum International Lectureship of the American Society for Nutrition was delivered by outgoing IUNS President, **Prof. Mark Wahlqvist**, and addressed the progress in nutritional science through the vision of the IUNS. The International Prize for Nutrition of the Danone Institute went to **Prof. David Barker** of Southampton, UK, who summarized the growing evidence-base for a crucial role of early life nutrition as a determinant of health in later life. The IUNS International Nutrition Prize of the International Nutrition Foundation was awarded to **Dr. Florentino Solon** of the Philippines; his lecture provide a perspective on "good governance" of nutrition in a case-study from his southeast Asian nation. It highlighted the broad testing and support for fortification of the food supply of the Philippines with micronutrients, including oils, margarines, sugar and flour with vitamin A. The inaugural Human Nutrition Award Lecture of DSM to **Dr. Robert M. Russell**, Director of the USDA Human Nutrition Research Center on Aging at Tufts University in Boston, USA. The focus of the awards lecture was specifically around vitamin A and its cellular and protective functions in nutrition and health. The awardee summarized the work in his laboratory which linked the metabolism of provitamin A carotenes to the regulatory role of retinoids. Finally, in a ceremony of Awards of the Nestlé Nutrition Institute of Africa provided awards for research publications, community service to nutrition and sustained nutrition leadership. The latter went to **Prof. Esté Vorster** of the Northwest University at Potchefstrom, South Africa, who had also chaired the Organizing Committee of the ICN event.

The traditional focus of Task-Force Sight and Life has been fostering improvement in micronutrient nutrition and combatting the adverse consequences of vitamin and mineral deficiencies. In order that attendees of the ICN with a specific disciplinary interest would not find sessions of interest competing with one another during the same time slot, a series of eight topic pathway clusters, one of which (No. P2) was designated "*Micronutrients*," were created. Shown in Table 1 are the six specific symposia scheduled within the

micronutrient cluster during each of two 2-hour parallel symposium periods programmed on the afternoons of Tuesday, Wednesday and Thursday of the Congress week.

TABLE 1. SESSIONS WITHIN THE TOPIC PATHWAY CLUSTER (No. P2) WITH SPECIAL REFERENCE TO MICRONUTRIENT METABOLISM AND NUTRITION WITHIN THE SYMPOSIUM PROGRAM*

- 1.2 Overcoming micronutrient deficiency through food fortification
- 2.2 Strategies to alleviate micronutrient malnutrition
- 3.2 Multiple micronutrient dietary supplements to control deficiencies
- 4.2 Building on the food we eat: Biofortification and food fortification in Africa
- 5.2 Specific micronutrient deficiencies
- 6.2 Zinc in health and disease

* The first number indicates the Parallel Symposium, and the second number represents topic pathway cluster

The creation of Pathway No 2., however, did not completely satisfy the situation of students and professionals dedicated to the study of vitamins, minerals and bioactive components, as symposia among the other topic pathway clusters offered important and substantial new information related to the broad area of micronutrient nutrition. The titles of these additional symposia of interest are listed in Table 2. Direct on-line viewing of the Scientific Program is available on the Congress website for as long as it is to be posted: www.puk.ac.za/iuns.

TABLE 2. ADDITIONAL SESSION TOPICS WITHIN THE SYMPOSIUM PROGRAM WITH SPECIAL INTEREST OR REFERENCE TO MICRONUTRIENTS*

1.4 Food and nutrition security: Food-based approaches

1.5 Immunology and nutrition

3.5 HIV/AIDS and nutrition: State of knowledge and the next steps

4.7 Bone health through the life cycle

5.5 Nutritional status assessment: Methodologies

5.8 Functional foods

6.5 Stable isotope techniques to move the nutrition agenda forward and to develop effective nutrition programmes

6.6 Harmonisation of nutrient requirements

* The first number indicates the Parallel Symposium, and the second number represents topic pathway cluster

Intertwined underlying themes ran through the majority of the plenary sessions and the two controversy-debate sessions (named "*Indaba*" for the local African term), and signaled a tension between the process scientific discovery and the implementation of remedial actions to alleviate health problems across the world. The larger of these themes related to the United Nations' *Millennium Development Goals* and their relatively sparse attention to resolving nutritional problems; this was commented upon in multiple plenary lectures. The other issue related to the nature and complexity of the world's nutritional problems (are they simple and straight-forward or convoluted and complex?), and the corresponding considerations for applied solutions and actions to address these problems. Frequent reference was made to the paradigm of a "dual burden" for public health -- of problems of deficiency and deprivation alongside issues of excess consumption and dietary imbalance -- inclining the balance of consensus to an acceptance of growing complexity. Some speakers even formulated "triple" and "quadruple" burdens for the epidemiology human illness. Within this context, it was widely conceded that

considerations of environmental pollution, physical inactivity and genetic constitutions are essential components of the public health equation. Hence, most had to admit that optimizing diet and nutrition would, at best, only **contribute** to the general solution, but that nutritional science could not singlehandedly clarify nor resolve all of the burden(s) of ill health. The contentions were first over the manner to engage the other disciplines into the scientific inquiry (through partnerships or by reinventing nutritional science?) and second about how to build inter-sectorial alliances for public health actions at local, national and bilateral or multilateral agency levels.

The discussions and debates about means, values and priorities set a stage for reassessing the vision, mission, scope and mandate for nutritional sciences and for the worldwide community of the IUNS. What are the relative roles and responsibilities of academia, civil society and the food industry for the correction of epidemic health and nutritional imbalances across societies? As such, it was heartening that **Prof. Ricardo Uauy** the incoming President of the IUNS for the 2005-2009 quadrennium, leading to the 19th ICN in Bangkok, Thailand four years hence, took this reassessment as the 4-year **challenge**. He also supported the inclusion of the **younger** generation of nutritionists across the regions to work through the regional Nutrition Leadership Programs in concert with the IUNS. Renovation of thinking and rejuvenation of leadership were the goals which **Dr. Uauy** would have the Council and its constituencies pursue during his tenure. We would hope that the Meeting Report that will grace the pages of this *Newsletter* in 2009 can report progress both in the advance of nutritional science and in our understanding of its role in the campaign for better human health and well-being.
