

Guest Article from the IUNS President:

Role of international nutrition science in human development and planetary health

The International Union of Nutritional Sciences (IUNS) is in a unique and responsible position to ensure that Contemporary and Future Nutritional Science delivers human and planetary goals. More than half of the world's nations have their national nutrition science organization as a member (Adhering Body) of IUNS. Such arrangements provide for dialogue amongst nutrition scientists internationally, which has intrinsic merit. Unless they are purposeful, though, a great deal of organizational effort does little more than simply maintain the organization as an end in itself. It is generally agreed that IUNS has a responsibility to contribute its expertise at several levels and in different ways. These include the development of international food/nutrition databases, and of nutritional definitions and criteria, together with guidelines and policies, on the basis of sound scientific principles. What needs greater emphasis is that all of this noble work provides an exceptional facility for human development and for what is increasingly critical, namely planetary health. Herein lies a trend for nutrition science, to be less anthropocentric and more mindful of ecosystems, their evolution and integrity, particularly in regard to the future food supply and healthful environments—a kind of “enlightened self-interest” for the human species and its food and nutrition scientists.

It is usually difficult to deal with the magnitude and extent of problems that beset us globally. No less the nutritional ones. So, perhaps paradoxically, international nutrition science also has to think and act locally, as well as globally. To this end, for the last quadrennium, the IUNS has had a particular focus on Africa, especially sub-Saharan Africa, and the IUNS leadership has agreed that this will continue for at least another quadrennium, if not longer. There is a general consensus that our generation of nutrition scientists will be regarded as negligent unless we address adequately and creatively the hunger and poverty in Africa. This is not to say that Africa is alone in this plight. Indeed, the regionalization of IUNS activities comes with an imprimatur to strengthen interregional collaboration, particularly between Africa, Asia and Latin America, but also within the African continent. During the last four years the African Union of Nutritional Sciences and the Middle Eastern Nutrition Association (includes North Africa) have been formed, with an African Continental Nutrition Congress planned for 2007 in Morocco.

Regional Nutrition Leadership and Institutional Capacity Building activities have gathered momentum—jointly between IUNS and the United Nations University. Inter-Scientific Union activities have strengthened; for example IUNS and the International Union of Food Science and Technology collaborate in an on-line Food Science and Technology training initiative in Africa. The IUNS President chairs the International Science Council initiative on the Sciences for Health and Well-Being. This engages all major science unions, so allowing new science platforms and models to develop in regard to contemporary and future needs.

Nutrition Science can justify a unique position amongst the sciences, and promote its own methodologies, strategies and objectives. However, the persistence, extent and gravity of nutritionally-related health problems demands more innovation and collaboration than at present. None of individual, societal or planetary health is addressable by

nutrition alone, but by partnerships among the sciences, or yet altogether different approaches.

Sensing a critical point in the history of nutrition science, often threatened by its incorrectly perceived irrelevance to economic development and health advancement, and by uncertain career pathways for talented young people, the IUNS President established an inquiry, jointly with the World Health Policy Forum (WHPF) and the University of Giessen, about a possible New (for the time being) Nutrition Science to reactivate the discipline and inspire support for it. This has led to the Giessen Declaration of 8th April 2005, prepared by a Group of Eminent Scholars from and beyond the realm of Nutrition Science. It is available on the IUNS web site and draws attention to the synergistic and integrative requirements of nutrition science with its biomedical, social and environmental dimensions.

For Nutrition Science to achieve its potential contribution to human development, its objectives will be:

1. To strengthen the Biomedical-Social-Environmental Science Partnership.
2. To facilitate the transfer of nutrition science and its partnerships to relevant technologies for human development and environmental sustainability.
3. To build the capacity of individuals, institutions and the private sector to optimize the food supply so that hunger is overcome, nutritionally-related disease prevented, and health promoted.
4. To work with communities to deal with nutritionally-related disease in ways that are culturally-sensitive, sustainable and effective.
5. To support sustainable food and nutrition policy based on sound science. In order to be organizationally competent to tackle these objectives, the IUNS has focussed its resources these past four years on the following:
 - a. The International Congress of Nutrition in Durban, to ensure it has positive consequences for Africa and encourages dialogue amongst Communities-in-Development worldwide. The congress is also much more work-in-progress than usual, and its pre-congress workshops (Safaris) feed directly into the congress.
 - b. Regionalization of IUNS activities and programs with portfolio responsibilities of Councillors for Regions, and sharing of regional facilities and resources with UN Agencies and a progressively regionalized ICSU.
 - c. The case for nutrition science and cognate technologies to have economic significance through improvement in the human condition and, therefore, a solid justification for a greater flow of resources into the science. At the same time, and with similar reasoning, the work of IUNS would itself generate revenue, and help sustain it by the employment of talented staff who would be provided with appropriate infrastructure. Science/technology partnerships and major internationally significant project management are part of the solution to this challenge.
 - d. Task forces that address IUNS objectives. These have had varying degrees of progress and impact, but, invariably, the process has been institution building, if not immediately consequential. For example, the Evidence Based Nutrition task force has worked with the Food and Agriculture Organization and the World Cancer Research Fund to develop a reference science-based platform for nutrition policy and expenditure. Its future course alongside Evidence Based Medicine in National and International Health Policy will require ongoing review and commitment.

The Eco-Nutrition task force has contributed to the work of other initiatives, such as those in the new Nutrition Science, InFoods, and Indigenous Food Systems, with less standalone significance than was envisaged. Nutritional Resistance to Infection has set out a raft of new issues in nutrition science including the missing information about parasitic disease and nutritional status; the approaches taken to emergency nutrition during the Tsunami disaster; and the growing concern about new pathogens which cross species barriers where ecosystems are impaired or malnutrition supervenes. Nutrition and Lifelong Health has opened up the enquiry of how nutritional status at any stage of life may affect health and well-being at a later stage and reminded us of the inadequacy of present nutrition policies in regard to perinatal mortality, growth and development and Disability Adjusted Life Expectancies (DALES). And then there are the profoundly important findings of the Transitional Nutrition Technologies and Nutrition, School Feeding task forces.

A great tribute is to be paid to those who have led these task forces, to those who have served on them, and to their younger members who are our future leaders. We see all activities of the Union as opportunities for capacity building. The recruitment and accord of responsibility to younger nutrition scientists is an undertaking we have, along with other scientific unions, to ICSU.

That there should be an epoch-making significance to the future nutrition science is self-evident to many of us, but this view is not as widespread as it needs to be among decision makers. The momentum that now exists in IUNS should make its future and relevance bright, but nothing should be taken for granted. The acid test of how we are travelling will be when Africa turns the nutritional corner, under the stewardship of Africans.

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