

## Editorial Beginnings



Out of Africa there is always something new. This special issue of *Public Health Nutrition* is timed as a contribution to the 18th International Congress of Nutrition, held for the first time in Africa; and it is good news. Here are the beginnings of the new nutrition science: for all delegates to the congress; for all readers of the journal; for all concerned with the teaching and practice of nutrition from scientists to volunteers to parents; and for all without qualification, because we humans and the whole living and physical world have a shared stake in nutrition. This is what makes our profession vital.

*The New Nutrition Science project* is work in progress. Its purpose is to transform the discipline, so that it becomes increasingly effective in this time of unprecedented and accelerating change, comprehension of which tests us past any normal limits<sup>1</sup>. Its method is the creation of a new conceptual structure, itself groundwork for a new general theory. Its intention includes inspiration of new teaching and practice, creation of new networks and alliances, and development of new understanding of the need for enlightened global, national and local agriculture and food practices and policies. Its mission includes empowerment of all professionals to handle the relevant most important and urgent opportunities and challenges faced by humanity in the twenty-first century. Its vision is to help us all continue to make a lasting difference for the better in the world.

### Natural philosophy

There is nothing new under the sun. Every student knows that until very recently in human history, the study, teaching and practice of nutrition has been part of the philosophy of life. From the first records in Egypt around 6000 years ago until the first period of industrialisation in Europe about 200 years ago, dietetics – as the discipline became known – was concerned with the relationship of foods and drinks with the health of humans within society and nature, and as recently as 1800 was defined as: ‘A systematic view of all objects relative to health in general and to food and drink in particular’<sup>2</sup>.

Indeed, until fairly recently, the concept of ‘diet’ meant much the same as ‘way of life’, and ‘health’ included mental, emotional and spiritual well-being, not just physical health – and certainly not just mere absence of disease. This remains so in traditional and native teaching and practice. Also, the idea that the purpose of the living and physical world is as an infinite human resource is historically and culturally unusual. For instance, traditionally in China ‘the

natural world was... the greatest of all living organisms, the governing principles of which had to be understood so that life could be led in harmony with it’<sup>3</sup>.

These ideas resonate in our world now and to come; for we need to take care in order to leave a world fit for future generations. We seem to be coming full circle. What does this mean for nutrition science?

### Modern science

Nutrition as a biological science, with its physiological, biochemical and medical aspects, took shape in Europe in the first half of the nineteenth century in special circumstances. At that time the social and political ideologies forcing the beginnings of modern science and technology were those of power: industrial revolution in the dominant European states, and then later in the USA, so enabled to develop, expand, control and conquer<sup>4</sup>. The governing principle was that of fast growth.

It is not by chance that most of the original advances in nutrition science were made in Germany and Britain (the countries of which the editors of this special issue of *Public Health Nutrition* are citizens), and then in the USA. The first discovery that gave modern nutrition science its influence on the fate of nations was of protein as a growth promoter. This has shaped the nature of global food systems and the size of the human race. The later discovery of other vital nutrients further enabled nutrition scientists to advise governments how to create sturdy young generations. Half the economic growth of Western Europe between 1790 and 1980 is attributed to improvements in public health including nutrition<sup>5</sup>, which also have had the effect of multiplying the global human population.

More recently what is now known as public health nutrition has addressed chronic diseases at first in rich parts of the world, and nutritional deficiencies and infectious diseases especially of childhood mostly in impoverished parts of the world. Throughout this time nutrition science has remained identified principally as a biological discipline.

### Our new world

So why a new nutrition science? What for? The overriding reason is that the world now is transformed from what it was two centuries ago, and even two decades ago. We are disorientated, as is inevitable in revolutionary times. We need new maps.

As stated in *The Giessen Declaration*<sup>6</sup>: 'The human species has now moved from a time in history when the science of nutrition, and food and nutrition policy, have been principally concerned with personal and population health and with the exploitation, production and consumption of food and associated resources, to a new period. Now all relevant sciences, including that of nutrition, should and will be principally concerned with the cultivation, conservation and sustenance of human, living and physical resources all together; and so with the health of the biosphere'.

In his paper published in this issue<sup>7</sup> Ricardo Uauy, President of the International Union of Nutritional Sciences 2005–2009, states: 'The most important and urgent issues that confront food and nutrition scientists in the twenty-first century are beyond the scope of conventionally defined human biology. We must be willing to encompass the social, economic, political and human rights dimensions of nutrition'. This is what the new nutrition is all about. It is a biological and also a social and environmental science, with scope and responsibilities that include and also go above and beyond those of the current conventional discipline. It is concerned with personal and population health, and also with planetary health – the welfare and future of the whole living and physical world of which humans are a part.

This special issue of *Public Health Nutrition* is meant as a beginning: a revival and renewal of the original vision and achievement of nutrition science, a return to the dietetic wisdom of the ages, and the outlines of a map to chart our course in our new world. Those brought together here so far have done their best. What happens now and in future depends on us all as professionals, and also as citizens.

## Process

*The New Nutrition Science project* began to take shape during the 1990s, including at the 16th and 17th International Congresses of Nutrition in Montreal, Canada in 1997 and Vienna, Austria in 2001; at the first meeting of the World Health Policy Forum in Camogli, Italy in 2001; at conferences held in Melbourne, Australia and Auckland, New Zealand in 2002; at the World Summit on Sustainable Development in Johannesburg, South Africa in 2002; and at annual meetings of the UN Standing Committee on Nutrition in Chennai, India, New York, USA and Brasília, Brazil in 2003, 2004 and 2005.

Drafts of the papers published here were presented, examined and revised during and as a result of a four-day workshop meeting in April 2005, jointly convened by the International Union of Nutritional Sciences (IUNS) and the World Health Policy Forum, held at Schloss

Rauischholzhausen, a facility of the Justus-Liebig University at Giessen, Germany.

*The New Nutrition Science project* is also the subject of two plenary lectures and a linked symposium at the 18th International Congress of Nutrition. These present the findings and conclusions of the project, and consider how its principles are already being applied and can be further developed in food and nutrition policies and practices, in order to identify, create, conserve and protect rational, sustainable and equitable communal, national and global food systems, and thus sustain the health, well-being and integrity of humankind and also that of the living and physical worlds.

Claus Leitzmann and Geoffrey Cannon  
Editors

## Thanks

*The design for The New Nutrition project shown in this special issue of Public Health Nutrition was done by Chris Jones of Design4Science*<sup>8</sup>. *The spiral symbol used, an organic shape representing movement on, round and up (a fusion of evolution and revolution), is the work of the Beijing calligrapher Ying Huang Bi.*

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- 7 Uauy R. Defining and addressing the nutritional needs of populations. *Public Health Nutrition* 2005; **8**(6A): 773–80.
- 8 <http://www.design4science.co.uk>