World Nutrition

Volume 1, Number 3, July 2010

Journal of the World Public Health Nutrition Association
Published monthly at www.wphna.org

The Association is an affiliated body of the International Union of Nutritional Sciences
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Editorial

Malnutrition: The experts disagree

If nutrition as a discipline and as a profession is compared with an edifice, the apt image is not an impregnable tower, whether built of ivory or steel. Nor is it a walled city, such as the Troy or Jerusalem represented in recent movies, before or after being overthrown and razed.

Seen as a building, nutrition is more like a supermarket, whose lead lines crowd out unfashionable or unprofitable products and niche items. Another apt analogy is a bookstore, whose windows and front tables are piled high with the latest products of transnational publishers, and whose shelves may include niche alternatives which sometimes turn out to sell well. But often the best books are to be found only in specialist or second-hand stores, or as treasured on the internet. Indeed, another analogy is with nutrition congresses, these bizarre parties whose delegates, badged by the Uranium sponsor, and carrying ecological bags handed out by Plutonium sponsors, wander into talks on the need for hydration and the opportunities afforded by c-omics and all the other –omics.

What truth is

A member of the *WN* editorial team remembers the shock experienced by one of his PhD students. He and she were walking towards the Palaces of Westminster in London a decade ago, to attend a meeting of the Parliamentary Food and Health Forum. She had just mastered the theory of regression analysis, necessary for her thesis. She was silent. When asked what was the matter, she explained that what she had just learned, was that the same set of data could be used to justified more than one conclusion. That's why she was shocked. Indeed, many conclusions, or maybe

any number of conclusions, some contradicting others. Where was the truth? The unkind response to her was 'Now you are in the real world'. This is because there is no such thing as 'the truth'. As with the end of the rainbow, or the Holy Grail, or everlasting love, we all feel an urge to seek out and find the truth, but it isn't there – or, if it is, it is in a form that we do not expect.

Our author

World Nutrition is proud to publish this month, a commentary that we regard as profoundly significant (1). It is certainly provocative. The author is Association member Urban Jonsson, who over the years has earned a reputation as the raging bull of international nutrition policy. His member's profile is published in this issue of the Association's website. He has also written a letter responding to Michael Latham's commentary 'The great vitamin A fiasco' (2) for this issue of *WN* (3). A Swedish citizen, he has lived and worked in Africa and Asia for many years, and his career at UNICEF has included being its Chief of Nutrition, based in New York.

His contribution to thinking on public health nutrition has included being the originator in modern times of the concept of the underlying and basic causes of malnutrition (4), adopted by UNICEF, other UN agencies, and now the basis of most useful public health teaching and practice. This can also be seen as the concept of the social, economic, political and environmental causes, not only of malnutrition, but also of disease in general; and indeed also, to look on the bright side, of well-being, happiness and fulfilment.

Dr Jonsson is well known to his vast number of admirers, friends and colleagues, as the epitome of the 'forceful democrat'. His interventions during congress sessions are characteristically awesome. This is because he says what he thinks and believes, based on vast knowledge and experience and deep-seated conviction, which often is not what most people who chew the cud of conventional thinking and practice want to hear. In his own defence, he may say that the state of the world's children is such that comfortable exchanges among well-heeled experts that never get to the point, cannot be justified. The editors of this journal agree with him.

Agreeing to agree

It has been said that 'the experts agree' on important issues of public health nutrition (5). At any one time this may be the case. It is more accurate though, to say that at any one time the most influential experts agree to agree, in what are known as 'consensual processes', whose conclusions typically are recorded in expert reports published by United Nations agencies, national governments, and other official or authoritative bodies. The process of 'agreeing to agree' invariably conceals disagreements, which may be incidental, or which may be profound.

One current case in point, is the consensus on the dietary and associated causes of obesity and of heart disease, which may be built up from decidedly shaky foundations, or even as some say, may even be a house of cards (6). Another case is the conventional wisdom on the effect of low-calorie dieting regimes on body fat (7). A further case, now well-known to readers of this journal, is the theory that interventions using massive doses of vitamin A are not only effective against vitamin A deficiency (as well might be expected!), but also actually or potentially save the lives of a high percentage of children in impoverished countries defined as being at high risk of malnutrition (2).

Anybody who has taken part in a consensual process, concerning public health nutrition – or indeed any topic whatsoever – knows that the process is political, not in the sense of party politics (although this may also be the case) but in the sense of policy. The conclusions of any document for which a group of experts is formally responsible, are largely determined by the composition of the expert group itself. One such expert, a world-weary veteran of public health nutrition committees, once said to a member of the *WN* editorial team that he could always tell what the recommendations of any report on food and nutrition policy would say, simply by turning to page 1 and scanning the list of members of the panel responsible for the report. There was no need to read the rest of the 200 or 500 pages.

Any organisation, such as a United Nations agency, that sees the need for policy guidance on a topic of public importance, and whose executives believe that the current conventional wisdom is unassailable and incontrovertible (which actually is never the case), is likely to assemble a group of experts who are either responsible for the current consensus, or who are known to agree with it. On the other hand, any organisation needing to review a current consensus that is being continuously attacked for any sort of reason – scientific, political, ideological, commercial, for example – is more likely to commission a review from an expert group that includes some members who reject the consensus. (Another tactic in these circumstances is the reverse, to make sure that all members of the expert group emphatically support the consensus, irrespective of the cogency of attacks against it. This is a dangerous game. Nemesis, also known as 'blow-back', is likely, sooner or later).

Matters of judgement

Does this mean that the real state of public health nutrition is one of chaos? No, it does not – well, not exactly. What it does mean, is that theories, policies, and actions are always a matter of human judgement. The idea that 'the truth' is 'out there', and that scientists are some sort of searchers for the lost Ark, or mountaineers roped up on a previously unclimbed ascent, or sifters of biological equivalents of sand on a shore working in hope of finding the alchemical grain that will cure cancer, is charming, but fanciful. That's not what science is about.

At best, the process of scientific investigation and discovery begins with an idea (7). The ability to have and pursue ideas is, after all, what marks humans out from other species, at least as far as we know. The process then continues by means of research that seeks – or should seek – to verify or contradict the idea. In this way the idea may be reinforced or overturned, or – and this is often the case – modified and refined in the light of accumulated evidence. A well-known example of this process is the initial idea set forth in the 1950s that dietary fat is an important cause of heart disease, which over the decades has become drastically modified without – as yet – being overturned.

Why be big

This proper understanding of the nature of the scientific endeavour has basic implications for the theory and practice of public health nutrition. This is what Dr Jonsson shows. Thus, to go behind the scope of his commentary, the idea that generated nutrition in its first modern form as a biochemical science, around the 1840s, is that it is good to grow fast and to be big and tall (8) At the time, the public health rationale for this idea was overwhelming. The health of the working and peasant classes of the newly industrialising nations of Europe was appalling, and what became known as deficiency diseases were rampant and epidemic.

There was also a compelling political and economic driver of this idea, which accounted for the first generations of nutrition scientists in Germany and Britain becoming well supported, funded and recognised. The governments of the great European powers were in need of fit strong young men to fight land wars, and for hale and hearty women as well as men to work overtime in factories producing war material. The overlords of industry were also delighted. This explains why protein of animal origin was initially identified as the 'master' nutrient, and also accounts for the colossal investment in the meat and dairy and also the infant formula industries. We still live with the consequences of this big idea of the 1840s. It had supreme force until after the Second World War of 1939-1945, and the creation of the United Nations, which is where Dr Jonsson's story begins.

Good and bad ideas

Another implication of the clear-sighted vision of public health nutrition – and all other organised activity – is that by their nature, ideas are not true or false. We may say that an idea is right or wrong, but what we really mean, is that it is more or less cogent or useful. Thus, Dr Jonsson's commentary begins by delineating what he appropriately terms the 'paradigm', or general idea, that the crucial cause of malnutrition in the classic sense is deficiency of protein. As he shows, this idea became consensual between the 1950s and mid-1970s, and drove world nutrition policy and practice as directed to impoverished countries. In Britain it became known as 'the British Rail breakfast theory of human nutrition', in the days that such rib-

sticking collations included egg, bacon and sausages, and maybe also kidneys, as well as toast, butter and marmalade.

The point here is that the protein deficiency idea was not wrong, then or now, in the sense of having no reality. Young children in some impoverished countries and communities, often where the staple starchy food is cassava (manioc), have suffered from protein deficiency, or kwashiorkor, and still do. What was wrong, was the pumping up of the idea, so that protein deficiency became seen as the 'master' form of malnutrition, and worse, that supply of protein, often in the form of dried milk or baby formula, from countries with dairy surpluses and industries whose policy was to penetrate 'developing countries', would win the war on world poverty. Emphasis on protein has grossly distorted world food systems.

The lesson to learn is that the value of general ideas depend partly on realities, which over time should be investigated and checked, and also largely on circumstances. The protein theory was a good idea in the period when physically big young people were needed. At least, it was a good idea from the point of view of the ruling classes of the then dominant European powers, but obviously not such a good idea from the point of view of countries who were over-run by imperialist countries, nor indeed from the point of view of the common people in Europe who were slaughtered. But the rationale for the protein big idea evaporates in a period when public health nutrition is more concerned with the health of older people, and indeed when wars are increasingly won by people who operate computers and press buttons, who are equally useful whatever their height, weight, size or shape.

Dr Jonsson goes on to show that since the middle of the last century, successive series of general theories of public health nutrition have become dominant, some only for brief periods of time. His analysis is perhaps rather too tidy, for when a powerful theory, once risen, then falls, it usually continues to resonate. The result is that now we live in a babel of theories. A more precise analogy is one of those parties when you are trying to have a coherent conversation, which is constantly being obliterated by the chatter of other people, while the drink continues to flow. At any one time, the dominant group of experts may agree – or, as said, agree to agree. But over time, constant revision of ideas, policies and programmes in our field has brought our profession into a state of disrepute, and has contributed to the current outrageous state of nutrition in many countries still suffering the effects of expropriation, invasion, and other forms of abuse (10-12). Observers, who include policy-makers within powerful governments, have the impression that in public health nutrition, the experts disagree. In the sense explained here, they are correct.

Money or rights?

The final sections of Dr Jonsson's commentary propose that right now, and unusually, there are two general ideas of public health nutrition competing for

supremacy. One, which he calls the 'investment in nutrition paradigm', is probably most likely to become dominant, simply because it is championed by the World Bank, sits comfortably within the 'free market' ideology which curiously, notwithstanding the collapse of confidence in red-in-tooth-and-claw capitalism, is still dominant, and is good for transnational business. It also suits the food and nutrition policy-makers and –brokers who are the equivalents of the Goldman Sachs 'masters of the universe'.

The competing general idea Dr Jonsson calls 'the human rights paradigm'. It can be characterised crudely as the 'power to the people' general theory. It has much in common with the political philosophy of the Peoples' Health Movement, celebrated in this issue of the Association's website by Claudio Schuftan (12). The human rights approach is supported by the editorial team responsible for this journal. It is also championed by Urban Jonsson himself. Given his vim and vigour, and his conviction and charisma, for this reason alone perhaps it will win the day.

The editors

References

1 Jonsson U. The rise and fall of paradigms in public health nutrition. [Commentary] *World Nutrition*, July 2010, **1**, 3: 128-158. Obtainable at www.wphna.org

2 Latham M. The great vitamin A fiasco. [Commentary] *World Nutrition* May 2010; **1**, 1: 12-45.

3 J onsson U. Time to return again to holistic policies. [Letter] *World Nutrition* July 2010, **1**, 3: 165-169. Obtainable at www.wphna.org

4 Jonsson U. Integrating political and economic factors within nutrition-related policy research : an economic perspective. In: Pinstrup-Andersen P (ed). *The Political Economy of Food and Nutrition Policies*. Baltimore: Johns Hopkins University Press, 1993.

5 Cannon G. *The Experts Agree. An analysis of one hundred authoritative scientific reports on food, nutrition and public health published throughout the world in thirty years, between 1961 and 1991*. London: Consumers' Association, 1992.

6 Taubes G. *Good Calories, Bad Calories. Challenging the Conventional Wisdom on Diet, Weight Control, and Disease*. New York: Knopf, 2007.

7 Cannon G. *Dieting Makes You Fat*. London: Century, 1993. New updated edition, London: Virgin, 2008.

8 Popper K. *The Logic of Scientific Discovery*. London: Hutchinson, 1959. (First published in German, 1934).

9 Brock W. *Justus von Liebig: the Chemical Gatekeeper*. Cambridge: Cambridge University Press, 1997.

10 Davis M. Late Victoran Holocausts. *El Niño Famines and the Making of the Third World*. London: Verso, 2001.
11 Galeano E. *Open Veins of Latin America. Five Centuries of the Pillage of a Continent*. London: Latin America Bureau, 1997. Originally published 1973.
12 Farmer P. *Pathologies of Power. Health, Human Rights, and the New War on the Poor*. Los Angeles: University of California Press, 2005.
13 Schuftan C. Decency crumbles in the face of greed, and other items. [Column] Website of the World Public Health Nutrition Association, July 2010. Obtainable at www.wphna.org

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Please cite as: Anon. The experts disagree. [Editorial] *World Nutrition*, July 2010, **1**, 3: 121-127. Obtainable at www.wphna.org