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*Editorial*

## The lost principle: Eat meals



***Why the global explosion of obesity? Easy! Meals are fast being displaced by tempting supply of fast-food dishes and snacks. Time to bring back the meal.***

This editorial introduces the *WN* commentary this month on the need to return to real shared meals as the centre of good nutrition in all its aspects. Here we explain why the discipline of nutrition has, for over half a century, overlooked and neglected the ways in which food is consumed, and for similar reasons has generally forgotten the social, cultural, economic, political and environmental dimensions of nutrition. Minds are now changing, but with inadequate sense of imperative urgency, and without a full sense of the scale of new systematic thinking required. The rapid

replacement of shared meals by snacks eaten in isolation, throughout high-income and now most other countries, indicates the immensity of the task facing all relevant professionals concerned with public health.

*Recognize* that a paradigm shift is an imperative in dealing with NCDs' [non-communicable diseases] challenges, and that NCDs are caused not only by biomedical factors but also by social, economic and environmental factors'. This is from the preamble to the draft *Moscow Declaration* on control and prevention of heart disease, cancer and other killer and major chronic diseases, now dominant as causes of disability and death in almost all countries in the world (1) as drafted by WHO. It was submitted for consideration at the Moscow pre-UN Summit hosted by Russian prime minister Vladimir Putin, just held, on 28-29 April.

This adoption of the multi-dimensional approach, as first set out in this form within what has turned out to be the profoundly influential *Giessen Declaration* on the nature of nutrition as a science and source of policy and action, is a just cause of satisfaction to public health nutrition professionals. The Moscow preamble also states: 'Note that policies to reduce the social, economic, environmental and behavioural risk factors that determine NCDs need to be rapidly and fully implemented to ensure the most effective responses to NCDs, and to avoid substantial fiscal imbalances and impoverishment of families and individuals due to health costs'. This is also well drafted, and reflects reports stating that almost all countries cannot afford population-wide treatment of chronic diseases, notably cancers (2), and identifying people as members of communities and families as well as individuals (3,4).

### **What happened to meals?**

However, there is no mention in any of the documents prepared for the Moscow pre-Summit, of meals. Nutrients yes, foods sometimes, meals no. This is ironic as well as odd. Those of us who are veterans of congresses and other assemblies concerned with nutrition, whether in relation to obesity or starvation, which may even touch on well-being, know that much of the informal business, and some of the formalities, take place during lunches, suppers, 'gala' dinners, and other delicious and even sumptuous – meals.

Our observation is that personally, nutrition scientists, and others concerned with food and nutrition policy, enjoy meals. Indeed, a number of our colleagues, who might not mind being identified (but we won't) are gastronomic artists, who in congenial candlelit company will argue expertly with *maitres d'* about the provenance or temperature of a vintage wine, or exclaim with joy at the savours and textures of successive *amuses-bouche*. But professionally, nutritionists almost utterly neglect the ways in which foods and nutrients are processed, prepared, and then consumed, in the form of meals and their nature and frequency, or as dishes or snacks.

Indeed, with the exceptions of the Mediterranean diet, and various types of vegetarian diet, there is almost nothing in the orthodox literature about dietary patterns. Meals are absent. The index of one 900 page large format double-column recent edition of a standard nutrition textbook (5) includes 'Meals. Hormonal control of ingestion, 55. Protein dietary intake, 99'. That's it. An earlier edition of the same textbook (6) has in its index 'Meal frequency and plasma lipids, 328. Meals on wheels, 536'. That's it. Another recent large-format double-column 805 page textbook, this one published in the US (7), has no index entry for 'meals'.

### **Nutrition goes chemical**

Why is this? These facts are indefensible and indeed bizarre, but are easily explained. Meals are now not seen as 'scientific'. Nutrition still remains conventionally identified as a biochemical science. The point at which this dogma became entrenched can be dated exactly, to the day in 1939 when the first edition of *Chemical Composition of Foods* (8) was ready to go to press in London. This was at the time when 'the newer knowledge of nutrition' was in its first ascendancy, most of all in the US and UK. The latest editions published in this century, with the word 'chemical' removed from the title, remain the blueprint for analyses of the chemical constituents of foods prepared and published throughout the world (9). Such 'food composition tables', often and significantly termed 'bibles', and even 'sacred texts for dieticians, public-health officials, nutrition policy-makers, doctors and researchers' (10), remain a foundation for the teaching and practice of conventional nutrition science in practically all countries, and are seen as an indispensable tool in most studies of nutrition, health, and disease

Perhaps few of us have read this first edition, a model for similar tables published in the US, produced at the beginning of the second of the world wars in which the UK eventually was on the winning side. In Britain, victory was in part and crucially because of enlightened national food and nutrition policies led and enforced by the then coalition government. These included insistence on greater agricultural self-sufficiency, support of allotments and home gardens, creation of communal canteens selling cheap wholesome meals, provision of wholesome school meals, a 'national' brown loaf, rationing of luxuries and inessentials such as meat and sugar, promotion of vegetables and fruits as 'protective', and careful monitoring of the strength and health of the civilian population as well as of soldiers. Thus the application of nutrition in the UK at that time, including in its social, political, economic and environmental aspects, was in terms of the then current knowledge practically immaculate, and rates of chronic disease, most notably diabetes, dropped rapidly (11,12).

However, as a science nutrition became narrowly biochemical. The first edition of 'the sacred text' (8) included a preface dated 8 November 1939, two months after Britain declared war against Germany. It began 'The nutritional and dietetic

treatment of disease, as well as research into the problems of human nutrition, demand an exact knowledge of the chemical composition of food'. The main text began: 'A knowledge of the chemical composition of foods is the first essential in the dietary treatment of disease or in any quantitative study of human nutrition'. The similarity of these passages is no doubt because the secretary of the MRC's 'Committee Upon Human Nutrition', Robert McCance, a cadaverous dominant physician and physiologist, partial to experiments on himself, who became famous among many reasons for eating just one huge evening meal a day, was in a position to draft both claims. And we are not recalling ancient history here. Over 60 years later the current updated publication, now known as *McCance and Widdowson's The Composition of Foods* (9), begins its introduction by reverently quoting, word for word, the 1940 main text claim.

This reflects the fact that as conventionally taught and practiced, nutrition remains a biochemical discipline. The successful drive to isolate and insulate nutrition in this way, and to relegate dietetics to a trade for medical ancillary workers (13), came mainly from physicians, biochemists and physiologists determined to make nutrition a 'hard' biological science, with as much prestige as physics and chemistry, and thus a path to the peak accolade in the UK of fellowship of the Royal Society, or even a Nobel. Meals? Pish! That's 'soft' social science, not serious, stuff for recipe books and special hospital diets, not worth the attention of serious professionals aiming for high honour and recognition – except personally at mealtimes. That was the attitude, and it generally still is. Professionally, meals, and dietary patterns, became and remain cut off the nutritional map.

### **Nutrition goes clinical**

As another aspect of this calamitous process, nutrition in its prestigious forms became and remains mostly a clinical discipline, practiced in laboratories. As such it is in effect a junior subset of conventional medicine as now taught and practiced, which focuses on the individual, and on people as collections of individuals, presented to the professional for treatment. This has been intensified by the individualistic ideology originally invented in the USA (14) and now exported to most parts of the world, in which society (including the community and the family) and the environment are subjugated to what are seen as the individual rights, inclinations and choices of people in isolation from one another. The general result was characterised by the economist JK Galbraith half a century ago as 'private affluence and public squalor' (15). Look around you.

The clinical approach, and individualism in general, occurring in parallel with the identification of food with its chemical constituents, is the second catastrophe that has befallen the profession of nutrition, and thus population health. This is evident in the other type of nutrition 'bibles'. These are the official and other authoritative nutritional guidelines, which are meant to help control and prevent chronic diseases.

They have been issued regularly since the 1960s, at first by governments of high-income countries and by United Nations agencies, and later usually in adapted versions for other countries (16). With some important exceptions (such as 2-4, 17) the recommendations of these reports, when not addressed to populations in general, are aimed at individuals. Nutrition guidelines usually do not have indexes, but if you read them, with exceptions such as those cited above, you will almost certainly look in vain for any but incidental references to people in society, as community and family members.

What this means, is that in at least one crucial respect, nutrition guidelines typically are not part of the public health solution, but part of the problem. Inasmuch as they shape public policies, food systems and supplies, and popular guides, as well as personal choices, recommendations addressed to individuals in this respect have the effect of increasing the incidence of overweight and obesity, and related diseases such as heart disease and common cancers.

The rationale for what may at first seem to be a strange and even preposterous claim is compelling. It is this. Recommendations addressed to people as individuals are not intended to promote eating ready-to-heat dishes while watching television, 'grazing' in the street, consumption of more and more 'fast' and other 'convenience' products and snacks, and to discourage shared meals. But inasmuch as they are effective, this is their effect, this is what they do. Nutritional guidelines as usually devised aid and abet transnational manufacturers and caterers of energy-dense fatty, sugary or salty ultra-processed ready-to-eat or ready-to-heat dishes, snacks and such-like products. They teach the world to snack. They are the enemy of the real shared meal. They therefore also tend to destroy family life and the fabric of society. None of this might bother a white-coated professor, doing his utmost to treat humans as if they are laboratory rats. It needs to concern us. There are few indications that what is now the pandemic of overweight and obesity, and the rates of diabetes, cardiovascular disease, and various cancers in lower-income countries, are anywhere under control, let alone diminishing.

### **The systems approach**

There is now some reason for hope, though. Thus, one of the sessions at the Moscow pre-UN Summit just ended, had as part of its provisional agenda drafted by WHO; 'Governments should remove trans-fatty acids and reduce salt from industrially processed food, regulate marketing of food and non-alcoholic beverages to children, and improve availability of fruits and vegetables... Accelerating progress in reducing diet-related NCDs requires leadership of national authorities, political commitment, efficient and comprehensive governance mechanisms, adequate infrastructure and investment'. This is some sort of a beginning. It does at least make plain the central custodial responsibility of elected politicians to legislate on behalf of the people in their countries.

Will such calls to social action stick, and survive the Moscow meeting? We will see. A good sign is that two of the speakers in Moscow on these topics, Association Council member *Philip James*, and founder and leader of *World Action on Salt and Health* Graham MacGregor, are well-known to be tough customers with long years of experience of the machinations of those sectors of industry whose policies conflict with the imperative requirements of public health.

The Moscow meeting has however been only preliminary to the Summit being held at UN headquarters this September. One document that should prove useful between now and then is Carlos Monteiro's commentary in this issue of **World Nutrition**. It is all about meals. Before their feasts, speeches and toasts in illustrious company in New York, we invite the world's food and nutrition policy-makers to include real meals in their professional deliberations, and thus embrace the social, economic and environmental determinants of health, disease and well-being.

A paradigm shift, which is to say a whole new integrated conceptual framework, as a basis for rational policies and effective actions, is indeed needed, and right now. Only then is it conceivable that rates of obesity and chronic diseases, particularly in Asia, Africa and Latin America, could be brought under control. We need to begin at the beginning, with what is best for people in society to eat, throughout life, in the form of real shared meals.

*The editors*

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Members of the *WN* editorial team were members of the 2005 workshop of which the product was *The Giessen Declaration*. One member of the team drafted the first versions of the official national Brazilian dietary guidelines (3), and relevant parts of the two WCRF/AICR reports on food, nutrition and the prevention of cancer (2,4).

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