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References

 Monteiro CA (2009) Nutrition and health. The issue is not food, nor nutrients, so much as processing (Invited commentary). Public Health Nutr 12, 729–731.

- World Health Organization/Food and Agriculture Organization of the United Nations (1998) Preparation and Use of Food-based Dietary Guidelines. Report of a Joint Expert Consultation. WHO Technical Report Series no. 880. Geneva: WHO.
- Ferguson EL, Darmon N, Briend A & Premachandra IM (2004) Food-based dietary guidelines can be developed and tested using linear programming analysis. J Nutr 134, 951–957.
- The European Parliament and the Council of the European Union (2006) Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods. Official Journal of the European Union L404, 9–25.
- Agence Française de Sécurité Sanitaire des Aliments (2008) Définition de profils nutritionnels pour l'accès aux allégations nutritionnelles et de santé: propositions et arguments (Setting of nutrient profiles for accessing nutrition and health claims: proposals and arguments). Report June 2008. http://www.afssa.fr/Documents/NUT-Ra-Profils.pdf (accessed July 2009).
- European Commission, Health and Consumers Directorate-General (2009) Commission decision on the setting of nutrient profiles pursuant article 4(1) of regulation n° 1924/2006 of the European parliament an the council of 20 December 2006 on nutrition and health claims made on foods. Luxembourg: European Commission.
- Darmon N, Vieux F, Maillot M, Volatier JL & Martin A (2009) Nutrient profiles discriminate between foods according to their contribution to nutritionally adequate diets: a validation study using linear programming and the SAIN,LIM system. Am J Clin Nutr 89, 1227–1236.

All the harmful effects of ultra-processed foods are not captured by nutrient profiling

Madam

In reacting to my commentary on food processing and health⁽¹⁾, Nicole Darmon⁽²⁾ advocates nutrient profiling systems as an expression of food category-based recommendations. In so doing, she regrets the adoption by the European Community of a version of such systems that 'will likely induce the development of products that, in order to "pass" the system, will be moderately loaded with fat, sugar and/or salt, and in order to have something to claim, may be artificially fortified with vitamins, minerals or other ingredients considered as positive'. The EU decision makes one of my points. It illustrates the limitation of reducing the relationship between food and health to nutrient profiles, while ignoring other features and effects of food processing.

As I said in my commentary, diets largely made up from ultra-processed foods – such as breads, sausages, cookies, cereal bars, chips, ice creams, confectionery, savoury and sweet snacks in general, and soft drinks and other sugared beverages – are intrinsically harmful to human health. The reason is not only the nutrient profile of these foods.

Again as I said, other features of ultra-processed foods, unrelated to their nutrient composition and so not

detected by nutrient profiling systems, make both 'regular' and 'premium' products intrinsically harmful to health. Ultra-processed foods, whether 'regular' or 'premium', are not perishable (as vegetables and fruits are) and do not require preparation or cooking (as grains and meat do). This is why they are correctly termed 'convenience foods' or 'fast foods'. But the convenience and the rapidity cause eating patterns which are known to harm the human ability to regulate energy balance, and therefore increase the likelihood of excess eating and obesity. Such unhealthy eating patterns, which include snacking instead of having regular meals, eating while watching television and consuming a lot of energy in liquid form (3–5), are all reinforced by the typically very heavy and aggressive advertising and marketing of such foods.

Also, both 'regular' and 'premium' ultra-processed foods are branded, packaged and marketed to give the impression to consumers that they are unique. This, plus the incredibly low cost of the main ingredients used in the production of ultra-processed foods (vegetable oils and fats, starches, sugars and salt), and the limitless opportunities to invent 'new' products and market them all over the world, explain why transnational food and drink manufacturers have a colossal investment in this sector. This, plus sophisticated marketing techniques targeted particularly at children and adolescents, and the general failure of national governments to establish effective regulations to limit unethical marketing strategies, also explain the explosive increase of production and consumption of ultra-processed foods, and the displacement of unprocessed or minimally processed foods, now evident everywhere.

The best recommendation on all ultra-processed foods, irrespective of their nutrient profiles, is to avoid them, or at least to minimise their consumption.

Further, as well stated by Mark Lawrence⁽⁶⁾: '...as the degree of food processing increases, often so does the requirement for energy inputs – directly in the processing itself, and indirectly in packaging...'. This is another reason to avoid all types of ultra-processed foods. The weakening of traditional food cultures, and the loss of culinary diversity, are also not captured by nutrient profile systems.

Ultra-processed foods and drinks, in the amounts now produced and consumed, are a menace to public health all over the world. Regulations are needed that will restrict their advertising and marketing. So are fiscal policies that will stop them being artificially cheap and that will make unprocessed and minimally processed foods more affordable as well as more accessible.

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References

- Monteiro CA (2009) Nutrition and health. The issue is not food, nor nutrients, so much as processing (Invited commentary). Public Health Nutr 12, 729–731.
- Darmon N (2009) The good, the bad, and the ultra-processed (Letter to the Editor). Public Health Nutr 12, 1967–1968.
- 3. De Graaf C (2006) Effects of snacks on energy intake: an evolutionary perspective. *Appetite* **47**, 18–23.
- Robinson TN (1999) Reducing children's television viewing to prevent obesity: a randomized controlled trial. *JAMA* 282, 1561–1697.
- Mattes R (2006) Fluid calories and energy balance: the good, the bad, and the uncertain. *Physiol Behav* 89, 66–70.
- 6. Lawrence M (2009) Food guides. A compromise solution (Letter to the Editor). *Public Health Nutr* **12**, 1305.

Out of the Box

The Seven Year Niche

Madam

Readers who turn to the 'back of the book' eager after a feast of information for a dessert of ideas, will not find 'Out of the Box' (OOTB) this month. After 7 years and sixty-five issues without a break beginning in January 2003, the column is no more. It is an ex-column. Yes, I will be spending more time with my family and yes, I am writing a book (which I was, anyway). Let's now hear more voices.

A distinguished nutrition scientist once said of OOTB, published as it has been in a scientific journal owned by a learned society: 'Excellent stuff – but *very* unusual'. So my first thanks, madam, are to you, and to Barrie Margetts the begetter and first editor of *Public Health Nutrition*, and equally to successive presidents and officers of the Nutrition Society, for sustained encouragement or remarkable tolerance, and intermittent grace under pressure. On behalf of the editorial team as well as myself, thanks also to Katy Christomanou and Carol Miller of Cambridge University Press, and to Gill Watling, our ace text editor, who adapts academic style rules when faced with references to the Bible (or is it The Bible?), the Natural Death Centre, or *The Anatomy of Melancholy*.

Personal thanks to John Waterlow, exemplar and mentor, for his firm and heeded reminder that undernutrition, and its social, economic, political and environmental as well as biological causes, always needs prime attention⁽¹⁾. Equally, special thanks to Claus Leitzmann for our work in progress on the *New Nutrition Science project*.

Should a nutrition journal range as far as I have tried to do? The simple answer is to quote the title of this journal. Public health is a vast enterprise, and its great times have come again⁽²⁾. Another answer is to take note of what Margaret Chan, the current WHO Director-General, is saying. In an interview given in July⁽³⁾ she linked climate change and declining food security with massive increases in deaths from malnutrition and diarrhoea, the likelihood of more wars, and more floods, more water contamination, and more deaths from injuries and drowning. 'The prediction is that, within the next 15–20 years, food production in Africa will

drop by 50 per cent', she said. 'If that's the case, how many people will go hungry? Remember that malnourished, stunted children cannot reach their educational potential, which will have a massive social and economic impact'.

Is it the business of our profession to think about the fundamental causes of malnutrition, which so often include bad systems of governance, and to engage as citizens as well as professionals in public policy and action? I think so, yes, as do you madam, and I expect that readers of this letter believe so too. Towers, whether made of ivory or concrete, have their place, but we should limit our time in them. Likewise, boxes.

All sciences are human activities. As in law, well-constructed and presented evidence is crucial. As in statecraft, judgement and action are also essential. This is therefore a good time to commend the writings and lives of René Dubos, Robert McCarrison, John Boyd Orr and Rudolf Virchow, and to reflect on what their approaches to the responsibilities of science mean to us now. Living authors and activists who have most influenced OOTB include Mike Davis, Susan George, Tony McMichael and the mellifluous Amartya Sen.

The column has been sustained by information, support, advice, encouragement and guidance from what is now a network of many hundreds of friends, colleagues and contacts at all stages of their careers all over the world, many within the UN system, national governments, and the nutrition and allied professions, and what may seem to some to be a surprisingly large number of concerned citizens in the food, drink and associated industries.

While I travel a lot, OOTB has usually been written from Brazil. Thanks to a conference organised by Prakash Shetty at the London School in 1996⁽⁴⁾, I realised that the future of public health, with its nutrition component, is in the South, and therefore that much new thinking was needed – as it still is. At the turn of the millennium I was working within the federal Ministry of Health in Brasília as one of a team with Denise Coitinho, Elisabetta Recine, and colleagues all over the world. One result has been the current UN *Global Strategy on Infant and Young Child Feeding*, modified from the original Brazilian Resolution⁽⁵⁾. So yes, I think Brazil is as good a country as any, to survey the world scene.

This is not an auto-obituary. I am still around, and with your agreement madam, these are not my last words in this journal. Here are two more observations.

First, we are now entered into a new and tremendously challenging age. All health professionals, faced as we now are with precipitate urbanisation, economic globalisation, selfish ideologies, senseless wars, corruption in public life, outrageous inequities, uncontrolled pandemics, and threats to the elemental commons – air, water, soil, fuel – need to open our minds, review all we have learned, and think ahead again⁽¹⁾.

Second, all actors – notably leaders in multinational bodies, national governments, civil society organisations, relevant industries, the media, in institutions including