

The Food System



Towards 2015-2025



The Food System judgements on ultra-processing and product reformulation feature in the new Lancet series on the global 2015-2025 development agenda

Our news team reports. Obesity and chronic non-communicable diseases must be top of the global public health agenda from 2015 onwards. World development is now critically impeded by premature suffering and death from diabetes, premature heart disease, common cancers and other chronic diseases, as well as by obesity. The global South including Asia and Africa is worst affected. A powerful new *Lancet* series presses governments and the United Nations to face and fight this menace. Allied in this campaign (from left, above) are *Lancet* editor Richard Horton, UN Development Programme head Helen Clark, *Lancet* series masterminds Robert Beaglehole and Ruth Bonita, and former PAHO director George Alleyne. At the series launch in London last month emphasis was given to the paper 'Profits and pandemics'. This links the tobacco, alcohol and ultra-processed food product industries. Authors include (pictures at right, above), Rob Moodie, David Stuckler, and Carlos Monteiro.

The Lancet is now perhaps the leading journal in setting global health agenda. For the new series and its intended outcome of '25 by 25' (a 25 per cent reduction in specified chronic diseases by 2025) *The Lancet* has assembled a series of 'A teams'.

The Food System project, featured regularly in *World Nutrition*, is playing a part in this powerful new initiative, which is highly likely to influence policy formulation by the United Nations and its relevant agencies, other international forces, and national governments. 'Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries', is a forceful multi-author paper in the series. Lead co-authors are Rob Moodie of the University of Melbourne (next in the pictures above), David Stuckler of the University of Cambridge, and (right, above), Carlos Monteiro of the University of São Paulo (USP).

As seen this month in *World Nutrition*, Carlos Monteiro and the USP team of Geoffrey Cannon, Jean-Claude Moubarac, Renata Bertazzi Levy and Rafael Claro, are responsible for 'the ultra-processed thesis'. The nature of ultra-processed products is summarised in the *Lancet* paper: see Box 1. Speaking in London on the

occasion of the launch of the *Lancet* series, Carlos Monteiro said: 'Our paper may give an impression that we are bracketing the food industry together with the tobacco and alcohol industries. In fact, as our title indicates, this is precisely what we are not doing. Industry representatives say that everybody needs food, for life and health. I have studied food, nutrition and health for over 30 years, and I can confirm that this is correct! The food industry as a whole is obviously not like the tobacco or alcohol industries'.

He continued: 'But what nobody needs is what we identify and define in our paper as "ultra-processed products". Practically everything almost everybody eats and drinks is processed in some way. Many forms of food processing are beneficial or useful. But in a real sense, ultra-processed products are not foods. They typically are formulations of industrial ingredients, including additives, and usually contain little or even no real food... By the way, we are not saying that ultra-processed products should be completely avoided. The recommendation of my own group is that they should be consumed only in small quantities or occasionally'.

Ultra-processed products are now displacing foods and meals all over the world. This shift may be practically complete in countries like the US and UK. 'You might think that products like this are incidental items in most diets. This is not so. Here in the UK, more than 60% of dietary energy comes from ultra-processed products, and less than 25 per cent from fresh or minimally processed foods such as grains, vegetables, fruits, fresh meat, and milk. The story is much the same in the USA, and also in Mexico where rates of obesity are now highest in the world. In my country of Brazil, where the tradition of eating meals has not been displaced, just 30 per cent of dietary energy comes from ultra-processed products – but a few years ago the figure was 20 per cent'.

Box 1

Ultra-processed products

This box was published with references in The Lancet paper on 'Profits and Pandemics' published on-line on 12 February: [http://dx.doi.org/10.1016/50140-6736\(12\)62089-3](http://dx.doi.org/10.1016/50140-6736(12)62089-3)

Ultra-processed products are made from processed substances extracted or 'refined' from whole foods – eg oils, hydrogenated oils and fats, flours and starches, variants of sugar, and cheap parts or remnants of animal foods – with little or even no whole foods. , Products include burgers, frozen pasta, pizza and pasta dishes, nuggets and sticks, crisps, biscuits, candies, cereal bars, carbonated and other sugared drinks, and various snack products.

Most are made, advertised and sold by large or transnational corporations, and are very durable, palatable, and ready to consume, which is an enormous commercial

advantage over fresh and perishable whole or minimally processed foods. Consequently, their production and consumption is increasing quickly worldwide. In the global North...ultra-processed products have now largely replaced food systems and dietary patterns based on [meals and dishes prepared from] fresh and minimally processed food and culinary ingredients, [which overall are less fatty, sugary and salty]. In the global South – ie Asia, Africa and Latin America – ultra-processed products are displacing long-established dietary patterns, which are more suitable socially and environmentally.

Ultra-processed products are typically energy-dense, have a high glycemic load, are low in dietary fibre, micronutrients and phytochemicals, and are high in unhealthy types of dietary fat, free sugars or sodium. When consumed in modest amounts and with other healthy sources of calories, ultra-processed products generally are harmless. However, intense palatability (achieved with high content of fat, sugar or salt, and cosmetic and other additives), omnipresence [from supermarkets to filling stations, to vending machines in offices, schools, and hospitals] and sophisticated and aggressive marketing strategies (such as reduced price for super-size servings) all make modest consumption of ultra-processed products unlikely and displacement of fresh or minimally processed foods very likely. These factors also make ultra-processed products liable to harm endogenous satiety mechanisms and so promote energy overconsumption and thus obesity.

One main conclusion of the *Lancet* series is that ‘Multinational food, drink and alcohol industries are using similar strategies to the tobacco industry to undermine public health policies, and should be regulated’. Negotiating with multinational companies on salt, fat and sugar levels or including calorie and alcohol amounts on labels in the way the UK government has done through its ‘responsibility deal’ will not work, say the authors of a study published by the *Lancet*. ‘Self-regulation is like having burglars install your locks’ said co-lead author Rob Moodie, as quoted in the UK national press. ‘You feel you're safe, but you're not’.

Statutory regulation is essential. Public-private ‘partnerships’ are a trap. ‘The failure of industry to regulate itself... should be a renewed wake-up call to governments, the public health community, and civil society, to step in and regulate the harmful activities of these industries, rather than collaborate with them’.

Carlos Monteiro continued: ‘Our paper points to three parallel global phenomena. One is well-known: all over the world, rates of overweight and obesity have sharply increased. Two is that food supplies in most parts of the world have been or are being flooded above all by ultra-processed products, which are displacing long-established food systems based on the combination of foods and culinary ingredients into meals. A previous paper has identified this as ‘the snack attack’. Three is the growth since the 1980s of vast transnational corporations with sales exceeding the

gross domestic products of middle-size countries, and with annual marketing budgets that now can exceed \$US 1 billion. The main or even sole business of these businesses, whose main responsibility is to their shareholders and the money markets, is the manufacture, marketing and sale of very profitable, intensely palatable, even quasi-addictive ultra-processed products, which when solid are highly energy-dense.

‘We judge that the main dietary driver of the obesity pandemic is intrinsically unhealthy ultra-processed products. We also judge that the main intervention needed to prevent and control obesity at population and indeed global level, is statutory regulation that will make fresh and minimally processed foods more affordable and available, and – yes, on an analogy with alcohol and tobacco – will among other things restrict the marketing and availability of ultra-processed products, most of all to children and young people’.

It is commonly supposed that reformulation of ultra-processed products will improve public health. The *Lancet* paper refutes this mistaken view. See Box 2.

Box 2

Product reformulation

This box was published with references in The Lancet paper on ‘Profits and Pandemics’ published on-line on 12 February: [http://dx.doi.org/10/1016/50140-6736\(12\)62089-3](http://dx.doi.org/10/1016/50140-6736(12)62089-3)

A reason frequently given for ‘public-private partnerships’ with food and drink corporations – whose profits largely depend on ultra-processed products – is the encouragement of product reformulation, so that at least some of the products will contain for example less trans-fats, or less salt.

The case for reformulation is most apparent high-income countries where markets might be saturated with ultra-processed products – ie, more than 60 per cent of total energy. If the market is saturated, consumers may tend to prefer the new product without consuming more ultra-processed products – eg in the USA sales of sugared soft drinks are unchanged, and alternatives such as ‘designer water’ have increased. Nonetheless, in such countries the main emphasis on and support of national governments and the public health community should be promotion of healthy meals, dishes and foods.

Discussions about product reformulation, with or without public-private partnerships, have focused on risks and benefits in high-income countries. However, in lower-income countries benefits are less obvious, and the dangers are very apparent. In such countries consumption of ultra-processed products is currently relatively low. For this reason these countries are now the prime targets of transnational corporations. If they reformulate, advertise and promote some of their less unhealthy products as healthy – eg sodium-reduced (but still high energy-

dense) packaged snacks or artificially sweetened (but still nutrient-devoid) soft drinks – the overall consumption of ultra-processed products is likely to increase, would undermine long-established dietary patterns based on fresh or minimally processed foods. In lower income countries, the reformulation of ultra-processed food and drink products is similar to the tactics of the tobacco industry in introduction of filtered cigarettes and ‘low-tar’ cigarettes.

The reformulation approach is a damage limitation exercise, to avoid evidence based approaches such as the restriction of availability and of advertising, and pricing policies designed to promote healthy food, such as now being carried out by order of the Mayor and municipal authorities of New York City.

Co-lead author David Stuckler, a US citizen now based at Cambridge University, is a sociologist with a distinguished reputation, specialising in the impact of social, economic and political forces on food systems and supplies and thus on dietary patterns and population health. He was interviewed for *PLoS Medicine* in mid 2012, on the occasion of another series, this time on Big Food. His views are in Box 3.

Box 3

David Stuckler on Big Food



This is an edited extract from an interview with David Stuckler published by PLoS Medicine in July 2012, together with an editorial with Marion Nestle on Big Food

Our global food systems are failing to meet the world’s dietary needs. To understand why, it’s necessary to look at who are the main players – increasingly it’s large, powerful multinational companies. To deal with tobacco you have to address tobacco companies. So too when dealing with dietary issues, it is necessary to deal with global food companies and the markets that power them.

Why is this a global issue?

All the dietary problems that dominate the discussion in the US and UK – obesity, diabetes, heart disease – are now present in low- and middle-income countries. The difference is that there is little or no public health voice to respond. The global South countries have the opportunity to learn from the mistakes of the global North. But they face enormous pressure to do otherwise.

How does your training as a sociologist inform the examination of Big Food?

Sociology focuses on the hidden forces that affect our lives. It addresses power, politics, and inequality; the 'causes of the causes' of ill health. To address unhealthy food systems requires more than just answering technical questions of medicine and epidemiology. It also involves tackling underlying social, economic and political problems. We need new methods and tools to tackle these, and sociology and political economy have a wealth of insights to offer.

At what point in your career did you first start thinking about the food industry?

When I was working... at Yale, I took a course on global chronic diseases. As students we could see the similarities between tobacco and food debates. At the time, the Sugar Association had written a letter to WHO threatening to lobby the US government to cut its contribution to WHO funding if it did not change its strategy on Diet, Physical Activity, and Health. It was clear that we faced a long, uphill battle to improve global nutrition.

What further research is needed?

We need to know more about the addictive properties of food and how to build a case for effective legislation and regulation. Similar to how public-health battles on tobacco played out in the courts, it is likely that food issues will end up there too. There is also a need for consensus on how to interact with industry. Many public health and medical schools take money from Coca-Cola or PepsiCo as well as other sources with questionable records like ExxonMobil and Monsanto – is this acceptable? As much as we study individual risks, we equally need to apply our rigorous scientific methods to understanding population risk factors. This includes gaining a much better understanding of how to deal with the powerful influence of corporate interests on public health.

David Stuckler is co-editor and a chief contributor to Sick Societies: Responding to the Global Challenge of Chronic Disease (Oxford University Press, 2012). The book addresses the social, economic and political aspects of chronic diseases.