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UN Summit on non-communicable diseases
Down from the summit: So what now?



Introduction

After the summit, what then? This series of eleven short contributions looks ahead to when the delegates from UN member states have come down from the high-level meeting on prevention and control of non-communicable diseases, taking place in New York this month on 19-20 September. As stated in the Association's open letter to UN secretary general Ban Ki-moon, sent on 25 August, this summit can only be a beginning. The international and national work that needs to be done, to turn words into actions, then begins.

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Contributors have been asked each to write within a standard framework, based on their knowledge and experience, in a style comparable with those of the news and comment sections of journals concerned with public health. Their contributions are judgements, as any policy statements are and must be. After general observations, they address five questions, on the global prevalence, control and prevention of pandemic non-communicable diseases between now and 2020. The time-period is chosen to allow for the length of office of elected politicians and of officials of UN and other international organisations.

1 Most powerful institution or entity.
2 Most powerful person or office-holder.
3 Three main drivers of the NCD pandemic.
4 Three main actions to prevent and control NCDs.
5 Most influential document.

The contributions, drafted and published before the summit, had low expectations. As Association president Barrie Margetts has said: 'We believe that the best that ever could have been expected as an outcome of the New York meeting, is a statement of general principles and commitments'.

Practically all the contributors, in one way or another, emphasise, mention or allude to the current colossal power of the tobacco, alcohol, food and drink industries, sometimes known as Big Tobacco, Big Booze, Big Snack, Big Sugar, and Big Drink. While some are positive in tone, most make clear that the forces concerned with public health are currently overwhelmed by the forces concerned with private wealth, and have become gradually weakened as transnational industries have rapidly grown almighty.

Carlos Monteiro points out that the giant manufacturers of processed products do not operate alone. He identifies 'Inappropriate partnerships between transnationals and policy-makers, including governments and health authorities at all levels, UN and other international organisations, academic institutions, the scientific community, and policy makers in general. These partnerships are inappropriate because, with them, decisions which affect public health are taken by, or at least are shared with, bodies with conflicted interests'. Geoffrey Cannon makes a similar point in identifying the World Economic Forum not just as a meeting place for leaders of industry, UN agencies, national governments, and other masters of the universe, but as a place where global agenda are privately or secretly set, including those that determine the state of public health and public goods.

Barrie Margetts may well speak for the public health profession when he says that the time after the New York summit is the time to regroup. Also, referring to the then

current draft of the summit's Political Declaration, he says: 'The present draft specifies the need to tackle major NCDs as a whole. This is progress. The draft also identifies the social, economic and environmental determining factors of health and disease, as well as biological and behavioural factors. This is a success… The draft makes it clear that non-communicable diseases are preventable and can be controlled. These are not trivial gains'. We need to build on them, now, and throughout this decade.

Here follow summaries of the contributions.

General remarks

Low expectations and pessimism

In their general and other remarks, the contributors are practically unanimous in having low expectations of the summit. Philip James says: 'Colossal forces are doing everything in their power, which includes their control of most governments, to protect their interests'. Geoffrey Cannon, agreeing, says: 'The agenda…set for the UN summit is much the same as that previously worked out and accepted by the transnational food and drink processors'

Barry Popkin thinks the sights for the summit were set too low. Boyd Swinburn hopes it will be a good beginning. Camila Giugliani emphasises the forces aligned against health and justice. Carlos Monteiro sees no outstanding public health leaders. Walter Willett says: 'There is no institution that we can rely on for leadership in controlling the epidemic of NCDs'. While more hopeful, Ricardo Uauy has the same opinion. Claudio Schuftan says 'I am not optimistic'. David Stuckler, while having some hopes, fears that the meeting will be co-opted by vested interests. Sabrina Ionata notes the general lack of attention to obesity and NCDs among policy-makers.

Most powerful institution or entity

Given the global scope of the summit, contributors naturally thought of international organisations. Most of those identified are United Nations agencies, global financial or economic organisations, or else transnational industry.

UN agencies

Philip James and Sabrina Ionata interpret the question as referring to forces for good, and identifies the World Health Organization.

Finance and trade organisations

Barry Popkin and Boyd Swinburn choose the World Bank, and Boyd Swinburn adds the World Trade Organization and the International Monetary Fund, as very potent forces that may be good or bad in their effects on public health.

Industry

Camila Giugliani identifies transnational industry, including media, as the dominant malign forces. Geoffrey Cannon names the World Economic Forum as the most powerful obstacle. David Stuckler singles out the private sector. .

Nation states

Of the most powerful nation states, Boyd Swinburn says: 'It is a sad reflection of the self- interest of the global strongman, that the US has been such a non-contributor and non-signatory to many global agreements and treaties which try to address the "tragedy of the commons".' Ricardo Uauy says: 'National governments will continue to be challenged by the economic crisis, and the demands for freer trade and less regulation of the private sector'.

Civil society

Two contributors mention civil society. Claudio Schuftan looks on the bright side, and groups a number of leading civil society organisations as champions of good health. Ricardo Uauy's rather pessimistic view has resonance in the views of other contributors. He says: 'I do not see a single institution able to muster what it takes to drive international and national actions', and 'nor are there any really strong civil society institutions that can take up this challenge internationally and succeed'

None

Carlos Monteiro and Walter Willett see no institution or entity that is specially potent at international level.

Most powerful person or office-holder

UN officials

Claudio Schuftan, David Stuckler and Philip James all choose senior UN officials as potentially very influential. None of these is the head of a UN agency, and so these contributors pass over the most senior UN people, who might be expected to be the most potent champions of public health. Barry Popkin, Philip James and Ricardo Uauy remember times gone by when WHO and its leaders were outstanding. Philip James says: 'The potential leadership role of WHO is immense. But this depends on the character and the political skills of its director-general and its senior executives'.

Industrialists

Those chosen are either because of their industrial power or their influence as philanthropists. Camila Giugliani identifies Rupert Murdoch as a malign force. Geoffrey Cannon picks Bill Gates as a potent force, also mentioned by Philip James. Walter Willett singles out Michael Bloomberg as force for good specifically for New York, again also mentioned by Philip James.

National leaders

Boyd Swinburn picks the person who holds the post of US president. Sabrina Ionata points out that any head of state or prime minister potentially is a potent force.

Nobody

A number of contributors are unresponsive. This was either because they feel it is not appropriate to single out individuals (Carlos Monteiro, Ricardo Uuay, Sabrina Ionata), or because they see nobody as outstanding at any level (Barry Popkin) or at international level (Walter Willett). The general mood of the responses is that while the power of giant industries and their outstanding leaders is very clear, there are currently no charismatic champions of international public health.

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Three main drivers of the NCD pandemic

Some of the most striking forces that continue to increase rates of disease are identified by just one contributor. These include: patents, lack of medicines and inadequate access to primary health care (Camila Giugliani); inappropriate partnerships and associations of powerful people in government, industry, academia, the health professions and other actors (Carlos Monteiro); glorification of Western 'lifestyles' (Claudio Schuftan); speculators in unhealthy food commodities (David Stuckler); poverty (David Stuckler); not only loss of financial and human resources and capacity within the UN system, but also governments of rich countries going broke (Geoffrey Cannon); food and nutrition policies that were a good idea at the time but which have had long-term ill-effects (Philip James); the human built-in hunger for energy, sweetness and salt, exploited by industry (Philip James); and climate change – probably (Sabrina Ionata). Most if not all of these would probably figure in lists of the five or seven main drivers, particularly in a working group context where proposals are shared. So might others specified by just some contributors, mentioned below.

Unregulated 'free market' ideology and policies

The overwhelming view is that the NCD pandemic is being driven by very powerful commercial forces. Some contributors went a stage further and identified the 'free market' ideology, also known as 'economic globalisation', which has unleashed these forces. No contributor had a dissenting view.

Some contributors addressed 'big picture' issues and agreed that the dominant ideology of the most powerful nations and of international organisations they control, is the force that underlies others. Camila Giugliani denounces 'The ideology that incorporates a deep distrust of democratic decision-making, preferring instead the "invisible hand" of the "marketplace", the degradation of the welfare state and public sector provision, and the myth that "liberalisation" of trade globally will bring economic benefits to all'. Geoffrey Cannon identifies ' "Red in tooth and claw" Social Darwinist laissez-faire capitalism' and 'Its reinstatement since the 1980s… Its rationale, the so-called "neo-liberal" political philosophy, itself derived from the ideology of individualism, includes the mission to privatise public goods, including public health'. In milder language, Boyd Swinburn says: 'If an increasingly global and de-regulated marketplace can generate profits from basic human needs (think, food), desires (think, cars) and weaknesses (think, tobacco), then the inevitable result will be overconsumption of those products, eventually to the detriment of our health and our environment'. Ricardo Uauy says: 'The proposed changes in diets challenge the

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current business model of agricultural production, food processing, marketing and sales'.

Big Tobacco

Most contributors give special emphasis to smoking, or the tobacco industry, as a driver of disease, or a subject of action to prevent disease, or both. David Stuckler says: 'Tobacco is the world's greatest preventable cause of death. The problem is not tobacco as such, but the companies that manufacture a drug that, when used as intended, kills half its users… Current negotiations in preparation for the NCD Summit have reached a stumbling block on efforts to increase tobacco taxes in low- and middle-income countries'. On solutions, Walter Willett says: 'Governments must take strong actions to control tobacco use by adopting the WHO Framework Convention on Tobacco Control. The means to control tobacco use through education, restriction of use, and taxation, are well documented. Lack of political will is the only obstacle'.

Big Drink, Big Sugar, Big Snack

As well as the transnational tobacco industry, most contributors identify the huge corporations manufacturing and marketing alcohol, sugar and its products, and ultra-processed products – mostly snacks. Camila Giugliani identifies 'the transnationals – media, food, agribusiness, tobacco, food corporations' and also mentions Big Pharma. Ricardo Uauy recalls the pressure to neuter the *WHO Global Strategy on Diet, Physical Activity and Health* coming 'from producers of commodities, most notably sugar, that have enormous lobbying and political power'. Geoffrey Cannon points to: 'The dizzying rise beginning in the 1980s of corporations collectively best seen as Big Tobacco, Big Sugar, Big Snack, Big Booze, and their representative and associated organisations'. Carlos Monteiro, in referring to transnationals, identifies the 'irresistible strategies those corporations use to increase the consumption of their products, like price manipulation, product placement, brand campaigns and more recently, particularly in the case of ultra-processed foods and drinks, elusive product reformulations'. Claudio Schuftan refers to: The penetration of transnational corporations offering junk food, and also a myriad of ever-changing consumables with a very special focus on youth.' David Stuckler does not use the term 'transnational', but says: 'Change in food supplies is mainly being driven by an industry-led push to delivery low-cost, processed foods, typically high in added sugar, fat, and salt'. Walter Willett says that 'industries conduct extensive research better to exploit human vulnerabilities, and they have steadily become more effective in relation to human vulnerability, which does not change with time. Further, they have corrupted governments and government agencies, such as the US Department of Agriculture, so that these support corporate interests over the public's health'.

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Lack of capacity and failure of leadership

Are the contributors downhearted? Mostly, yes. 'There is no institution that we can rely on for leadership in controlling the epidemic of NCDs' says Walter Willett. 'The World Health Organization and most national governments are too influenced by powerful economic interests to be reliably supportive'. Barry Popkin says: 'I see nobody with the guts to take on the major issues'. Ricardo Uuay says: 'I do not see a single institution able to muster what it takes to drive international and national action'. At WHO now 'there is more paperwork, more lengthy documents, more careful wording – but less action'. Boyd Swinburn sees now as a time of 'political solution failure', explaining: 'Over the last 20 years, politicians have been subjected to increasing forces which threaten good governance… Strong public-good policy is becoming rarer, as good intentions get diluted into commercially-friendly compromises'. 'The reality these days is not reassuring' says Carlos Monteiro. Claudio Schuftan says: 'The world turns to the tune of a music score that is oblivious to our appeals' adding 'although probably things would be even worse if we did not constantly agitate'. Some contributors decided to be positive in their remarks but none contradicted this general sense of gloom even if they were not despondent.

Three main actions to prevent, control NCDs

As with drivers of NCDs, some of the most striking actions proposed to prevent and control NCDs are mentioned by just one contributor. These include: new policies for global agriculture (Barry Popkin); achieving a price on carbon (Boyd Swinburn); universal health systems that include basic primary health care (Camila Giugliani); discovery of industry documents (David Stuckler); global systems of social protection (David Stuckler); and a comprehensive global strategy that invites industrialists to accept and act on the public health imperative in their own interests (Philip James). Again, some if not all of these might well be in a longer list of actions specified by other contributors – or even be in their list of three, had they thought of them!

Statutory regulation

Many proposals here are the obverse of what is summarised above. Above all, in numbers of contributors, and emphasis, almost all of the contributors specify that lack of statutory regulation is a driver of NCDs, or that the use of law is needed to prevent and control NCDs, or both. Here, recommendations are clear, emphatic, and consistent. Geoffrey Cannon makes a broad point: 'The imposition of statutory regulations at international and national level that prevent "free" – meaning chaotic –

capital flow and flight, and that protect established (including indigenous and traditional) food systems and supplies'. Several contributors make the point that law is used to control availability and consumption of tobacco and alcohol, and that while food is a more complex area, laws enforced in the public interest are also needed. Camila Giugliani recommends formal codes to 'regulate or strengthen the regulation of the advertisement and promotion of tobacco, alcohol and unhealthy food products'. Barry Popkin sees the need for regulation at global level, and for heavy taxes on sugared soft drinks. David Stuckler agrees, saying: 'Sugar-sweetened products are significant drivers of both obesity and diabetes, especially among kids. The full social cost of sugar should be reflected in its price. Too often these prices are artificially low through a combination of sugar subsidies and overproduction (leading to "export dumping")'. Carlos Monteiro says that: 'increases in taxes, and prohibition of advertisements targeting children and adolescents, should apply to all alcoholic drinks and to all ultra-processed food and drink products'. Claudio Schuftan says: 'The word here must be *statutory* regulation. Let us stop the nonsense of voluntary guidelines. Look at the baby food industry's sorry record for more than half a century'. Philip James specifies that 'The provision of all meals, snacks, foods and drinks in public places should be made to comply with optimum nutritional criteria'. Boyd Swinburn specifies 'implementations of regulations to reduce marketing of obesogenic food to children'. Walter Willett specifies 'restriction on the promotion of unhealthy foods to children'.

Protection of healthy food systems

Claudio Schuftan, Carlos Monteiro, Geoffrey Cannon and Sabrina Ionata see the need to protect and preserve traditional and established food systems, including the shared meal. Such policies also require legislation and regulation. Carlos Monteiro specifies: 'Subsidies for production and commercialisation of fresh and minimally processed whole foods, preference to these foods in public food procurement' and 'campaigns to reinforce traditional food cultures and healthy eating patterns, are essential to check and to reduce production and consumption of ultra-processed products'.

Enabling of physical activity

Physical inactivity as a cause of NCDs, and the need for enabling environments – which also require regulation – is specified with different emphases by Boyd Swinburn, Claudio Schuftan and Philip James. Walter Willett says: Governments must play a leading role in promoting physical activity by creating a physical infrastructure that provides safe and attractive facilities to walk, ride bicycles, and play. Also, creating a public transportation system rather than primarily supporting automobile transportation is essential'.

So what now?

What becomes evident from these contributions is agreement on what is now a gross imbalance between forces promoting public health, and forces promoting private wealth. This is surely a political issue. The dominant political and economic ideology driving the policies of dominant nation states gives free rein to big business. Worse, it favours the most ruthless companies. It also surrenders responsibilities that should be the central duty of governments, to industry. This implies the privatisation of public health. As long as this ideology is dominant, despite what is now overwhelming evidence of its failure even in its own terms, rates of disease will surely increase, and human well-being will suffer.

So what now? A rational way forward, for all of us committed to improvement of public health, is to work with those governments, supported by professional and civil society organisations and other actors, who are now deciding that public health for all must take precedence over private wealth for a few. Many of these governments are of lower-income countries in the South. In this way we can build up capacity and achieve successes that need to be recorded and shared. We can expect support and guidance from the very many dedicated public servants working within UN agencies and other international organisations. Somewhere along these paths, leaders of industry will get the message, as key leaders of transnational energy companies did in the case of the need to preserve the earth's physical resources. There will be no quick fixes.

The editors

Here follow the views of our contributors, in full:

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Barry Popkin



My concern with the UN NCD Summit and its outcomes is that the focus of the major non-government organisations and multilateral agencies is on reductions in added salt and *trans*-fats, and is not on the bigger picture, namely added sugar, junk foods generally, and sugar-sweetened beverages. This is timid. It is focusing on the trivial and almost irrelevant when it comes to addressing global changes in obesity, diabetes, and overall nutrition-related non-communicable diseases.

1 Most powerful institution or entity

The World Bank
If the World Bank, and other international banks and funders, decide to invest in major initiatives, they have the resources and the perspective to examine programmes and policies, and to help us fight for major policy changes. After them it might be foundations that are willing to be innovative and take on the major issues, rather than focus on a few not unimportant but rather trivial components of food systems and supplies.

2 Most powerful person or office-holder

None
I see nobody with the guts to take on the major issues. Potentially, any global leader could do this, such as the president of the World Bank, or head of the UN and key UN agencies, if they acted wisely.

3 Three main drivers of the NCD pandemic

Lack of regulations
Throughout the entire food sector as these should relate to health. Underlying this is a mentality that has created first and foremost a need for total energy. What remains missing is the foresight to think about diet quality, and to adapt agriculture and

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agribusiness to health and nutrition-related concerns before these sectors expanded, as they have in the past several decades.

No clear voices in global governance focusing on the major issues
When Derek Yach and Pekka Puska were senior WHO executives, with a relatively bold director-general, they helped to lead that charge. But WHO and other major leadership has shifted, and they now all avoid the major issues when it comes to addressing shifts in patterns of diet and physical activity, and obesity.

Lack of vision
Our inability as a profession to create major examples of successful large-scale change, that we can use to address global problems at a global level. Without examples of successful policy and programmatic change, monitored and measured over time, we really have a weak case to present options.

4 Three main actions to prevent and control NCDs

Increase the price of sugared soft drinks
Levy heavy taxes on added sugar in beverages (including fruit juice concentrate). Also tax added sugar in other processed foods, but less heavily.

Regulation at global level
Whose purpose is to promote healthy foods and drinks.

New global agriculture policy
Multinational and national governments and funding agencies need to refocus their policies on agriculture and agribusiness, in order to reshape the entire culture and food system while continuing to focus on hunger so all types of malnutrition can be effectively addressed.

5 Most influential document

WHO. *Obesity: preventing and managing the global epidemic*
Report of a WHO consultation. WHO technical report 894. Geneva: WHO, 2000.
This is a possible choice.

Distinguished Professor, Department of Global Nutrition
University of North Carolina at Chapel Hill , USA

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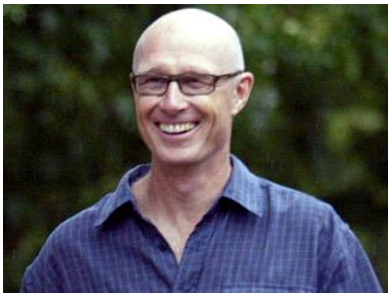
Boyd Swinburn



If an increasingly global and de-regulated marketplace can generate profits from basic human needs (think, food), desires (think, cars) and weaknesses (think, tobacco), then the inevitable result will be overconsumption of those products, eventually to the detriment of our health and our environment. The problems then become market failures, whereby an under-regulated market is not delivering the maximum utilities or benefits. The solutions to NCD epidemics must be supported by strong regulations which set the boundaries of commercial activities in relation to the NCD-promoting products. Tobacco control is the classic case. Unfortunately, we are also entering a new realm of 'political solution failure'. Over the last 20 years, politicians have been subjected to increasing forces which threaten good governance. Chief among these are the unrelenting pressures from 24-hour news cycles demanding announceables and soundbites, and the escalating forces of vested interest lobbying. Strong public-good policy is becoming rarer, as good intentions get diluted into commercially-friendly compromises, as happened so dramatically in the US health care reforms. The hope is that the UN High Level Meeting on NCDs will start the process of fortifying politicians to reclaim public policy for the public interest.

1 Most powerful institution or entity

World Trade Organization, World Bank, International Monetary Fund
And other international financial and trade organisations. Just as ministries of health are relatively weak power players compared with ministries of finance at a national level, so the global health agencies, like WHO, are relatively weak power players compared with the global financial and trade organisations like the World Trade Organization, the World Bank, and the International Monetary Fund. They are highly influential in driving the political focus on the single bottom line – economic outcomes. In fact, it is really a 'middle line' because we are passing many future costs, like cleaning up the planet, onto our great-grandchildren. Economic development and improvements in human social and health outcomes go hand-in-hand up to a point, by lifting poor countries into economic prosperity, but then the law of diminishing returns and increasing detriments sets in. But still, even for wealthy countries, political

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goals are still dominated by the single middle line, rather than the quadruple bottom lines of economic, environmental, social and health outcomes.

2 Most powerful person or office-holder

The US president

The US seems to be walking along the edge of a crumbly financial cliff face. But it is still the key global force, and its actions and inactions on the world stage are game makers and game breakers. Notwithstanding the constraining forces on politicians mentioned above, the US president is the single person who can most set the global tone. It is a sad reflection of the self- interest of the global strongman, that the US has been such a non-contributor and non-signatory to many global agreements and treaties which try to address the 'tragedy of the commons'. Barack Obama seems to be trying to set a different tone to US global leadership responsibilities and his response to the NCD Summit will be critical.

3 Three main drivers of the NCD pandemic

Behaviours: smoking, unhealthy diets, physical inactivity

These are the proximal drivers. This is the easy part to define, although the debate about the details of what is deemed healthy and unhealthy in diets continues to preoccupy scientists and the public alike.

Environments: commercial pushing of behaviours

These are the medial drivers. In countries like Australia, where the tobacco industry has little political power, great strides can be made in tobacco control. Countries like China, where the industry is embedded within government, are at the other extreme. The push factors driving the increased consumption of obesogenic, processed food are becoming quite clear, but the nature of food and the food industry makes it harder to reduce their influence on public policy.

Political and economic policy structures: drivers of over-consumption

These are the distal drivers. Political imperatives for economic growth often translate into increasing consumption which very quickly becomes over-consumption. The mindset of increasing profits and economic activity as the panacea for prosperity and well being for this planet and its people is as short-sighted as it is pervasive.

4 Three main actions to prevent and control NCDs

Implement the Framework Convention on Tobacco Control in all countries

The specifics of the major actions needed are agreed and signed up to, and there are several exemplar states leading the way. Dealing with the lobby power of the tobacco

industry, and conflicts of interest within government, are the main barriers to implementation.

Reduce marketing of obesogenic food to children

This is amenable to regulation and has widespread public and professional support. An international code is urgently needed. This should be a specific target to emerge from the NCD Summit. Exemplar implementations of regulations to reduce marketing of obesogenic food to children at the state level are also urgently needed to show that, like tobacco control, it is achievable, effective and does not cause the sky to fall in. This will be an important trigger for attitudinal changes on what is considered 'normal' food for children.

Achieving a price on carbon

The origins of climate change and obesity can be traced back to common economic and policy structures that promote consumption without safeguarding against over-consumption. Therefore, actions to reduce greenhouse gas emissions will have positive spin-offs for obesity. These will encourage active transport, discourage the ultra-processing of food, and start cultural shifts in thinking towards sustainable consumption and quadruple bottom lines.

5 Most influential document

Malcolm Gladwell. *The Tipping Point*

How Little Things Can Make a Big Difference. New York: Little Brown, 2000. The trail of official and academic reports supporting the need for action on NCDs is long and strong, and necessarily incremental. In *The Tipping Point,* Malcolm Gladwell dissects the emergence of social movement 'epidemics' whereby certain little things can make a big difference if they can tip behaviours over into new social norms that become self-reinforcing and sustained. We need to take these lessons to create two new 'epidemics': healthy, sustainable eating patterns, and; regular physical activity and active transport.

Co-chair of the International Obesity Task Force
Director, Centre for Obesity Prevention
Deakin University, Australia

Camila Giugliani



The prevalence and distribution of NCDs today, is a picture of inequities. NCDs are increasingly affecting the poorest, people with lower education, and those made vulnerable by centuries of oppression and exclusion (such as indigenous peoples and afro descendants in many places). Inequities are a consequence of a model of society that has been built largely upon values of individualism, selfishness, consumerism, materialism, and anthropocentrism. The concentration of power and wealth in the hands of a privileged few is at the heart of the NCD pandemic, especially in low income countries. Combating NCDs is not only an issue of preventing risk factors and modifying individuals' 'lifestyles', it is largely a question of realising how unsustainable our system is shown to be, and acting to change it towards one that nurtures solidarity instead of greed. All this proves the urgent need to act on the social determinants of health.

1 Most powerful institution or entity

The transnationals – media, food, agribusiness, tobacco, food corporations
Big Media is the most powerful actor in the sense of shaping people's opinions. Transnational food companies, agribusiness and the tobacco industry shape unfair trade agreements that take away people's autonomy and right to choose. Transnational drug companies have clear interests in terms of marketing and profits.

2 Most powerful person or office-holder

Rupert Murdoch
News Corporation has excessive power, and uses it in favour of the other institutions and entities identified named above.

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3 Three main drivers of the NCD pandemic

Neoliberalism
This is the ideology that incorporates a deep distrust of democratic decision-making, preferring instead the 'invisible hand' of the 'marketplace', the degradation of the welfare state and public sector provision, and the myth that 'liberalisation' of trade globally will bring economic benefits to all. Global trade 'liberalisation' is combined with massive subsidies to agribusiness and strengthened intellectual property rights. It has given increasing power to the Big Food corporations, and has undermined national food sovereignty in many countries, especially low-income countries.

Patents and lack of access to medicines
The impacts of TRIPS (trade-related aspects of intellectual property rights) on access to essential medicines are well known. These include high prices in poor countries, resulting in lower rates of appropriate treatment in places where NCDs are having the most devastating impact .

Inadequate health systems
Health systems not based on comprehensive primary health care will never be ready to deal appropriately with NCDs at the population level. In terms of prevention and treatment, primary health care is the right strategy to address the social determinants of health, promoting inter-sectoral action and community participation.

4 Three main actions to prevent and control NCDs

Regulation of transnationals
It is essential to regulate transnationals according to the public interest. In addition, a code of conduct needs to be developed to regulate or strengthen the regulation of the advertisement and promotion of tobacco, alcohol and unhealthy food products.

Laws that ensure equitable access to diagnostic tools and treatments
It is also essential to develop legal and other formal policy measures to ensure access to affordable diagnostic tools and treatment for NCDs. These should make full use of the flexibilities of trade-related aspects of intellectual property rights.

Universal health systems based on comprehensive primary health care
These need to be developed. NCDs are chronic in nature. They require continued and comprehensive care which is culturally appropriate. The primary health care approach should also favour inter-sectoral actions to address the social determinants of health.

5 Most influential document

Closing the Gap in a Generation

Report of the Commission on Social Determinants of Health. Geneva: WHO, 2010. The report emphasises the importance of looking at the equity dimensions as well as the disease process. Equity dimensions are largely shaping the incidence and prevalence of NCDs These variations are closely linked to the social and environmental factors, not just to individual behaviours. Underprivileged people are trapped in a circle of poverty and disease. Root causes of ill health have to be tackled to address the issue effectively.

Family and community physician
Lecturer at the Federal University of Rio Grande do Sul
Porto Alegre, Brazil
The views here derive from statements of the People's Health Movement

Carlos Monteiro



I am a physician; I have dedicated most of my professional life to study the epidemiology and control of public health problems related to food and nutrition, mostly in Brazil but also internationally. During the 1970s and 1980s my concern was with problems such as low birthweight, child undernutrition, and diarrhoea. With the advent of obesity and other nutrition-related NCDs as public health problems and only partial reduction in undernutrition, my agenda of research increased considerably. Except for keeping me sometimes too busy, I see it as an advantage that my duty has been and is to study determinants and consequences of both underfeeding and overfeeding. For instance, it is easier to understand the role of ultra-processed food products in producing obesity and NCDs in older children and adults when you understand the role of infant formula in producing undernutrition and diarrhoea. In a similar way, we can learn to fight obesity and NCDs more effectively from the experience we have accumulated in fighting undernutrition.

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1 Most powerful institution or entity

None
I would like to be able to say: institutions responsible for the protection of public health, including national governments and UN agencies. But the reality these days is not reassuring.

2 Most powerful person or office-holder

None
I don't see this as an issue of single individuals.

3 Three main drivers of the NCD pandemic

I assume this means preventable drivers. Population ageing is probably the main factor underlying the increase in the global NCD burden but we can't do much about that. Also, there is a big difference between the situation of high income countries, where consumption of tobacco, alcoholic drinks, and ultra-processed foods and drinks, although unacceptably high, is generally not increasing and the high burden of NCDs is relatively stable, and the situation of middle- and low-income countries where the consumption of those products is rapidly rising and the prevalence of NCDs is exploding.

Increasing consumption of tobacco, alcohol and ultra-processed food and drinks
In particular in middle- and low-income countries. And, to go deeper:

Transnational corporations that aggressively market these products
Again, in particular in middle- and low-income countries, with vast budgets and little if any effective regulation. By marketing I am referring not just to advertisements of specific products but rather to all irresistible strategies those corporations use to increase the consumption of their products, like price manipulation, product placement, brand campaigns and more recently, particularly in the case of ultra-processed foods and drinks, elusive product reformulations ('light' and or 'fortified' products); and also

Inappropriate partnerships between transnationals and policy-makers
Including governments and health authorities at all levels, UN and other international organisations, academic institutions, the scientific community, and policy makers in general. These partnerships are inappropriate: with them, decisions which affect public health are taken by, or at least are shared with, bodies with conflicted interests. They also represent excellent marketing opportunities for brands of unhealthy products.

4 Three main actions to prevent and control NCDs

The three actions specified here are each part of a broad approach to prevention and control of NCDs. Each should be seen as part of a greater whole.

Tobacco control
The types of public policy that control tobacco in many high-income countries and also in some middle-income countries, like my own country of Brazil, are vitally important in themselves. They include strict marketing regulation and persuasive supportive measures. In the case of tobacco control in Brazil, where prevalence of adult smokers declined from more than 50 per cent in the 1970s to 35 per cent in the 1980s and now to only 17 per cent in 2009, public policy actions include total prohibition of tobacco mass-media advertisements, restricted selling points, increased taxation, compulsory prominent messages on the harm caused to health printed on cigarettes packages, creation of tobacco-free public environments, support by the national health system to smokers to quit the addiction, and incentives to tobacco farmers to change to other crops.

Strict regulation of other unhealthy products
Such methods need to be used to improve public health in other areas than tobacco, and should include measures to check and decrease consumption of alcohol and ultra-processed food and drink products, in Brazil and everywhere. Methods of tobacco control should of course be adapted, to allow for real differences between tobacco, alcohol, and ultra-processed products. This said, increases in taxes, and prohibition of advertisements targeting children and adolescents, should apply to all alcoholic drinks and to all ultra-processed food and drink products (UPP). Further, at any age, incentives to alcohol abuse or to compulsive consumption of UPP should be severely penalised. Any advertisement of these products should include statements on the serious health consequences of excessive consumption.

Support for healthy food systems and supplies
Subsidies for production and commercialisation of fresh and minimally processed whole foods, preference to these foods in public food procurement, and campaigns to reinforce traditional food cultures and healthy eating patterns, are essential to check and to reduce production and consumption of ultra-processed products.

5. Most influential document

Amartya Sen, Jean Drèze (editors): *Hunger and Public Action*
Oxford: Clarendon Press, 1989
Several scholars influence me on nutrition-related NCDs. These include Barry Popkin on the nutrition transition, Boyd Swinburn on the obesogenic environment,

Tim Lang for his comprehensive approach to the global food system, Marion Nestle for her acute political analyses of food and nutrition, and Michael Pollan for bringing together food, culture and politics. All the same though, I pick *Hunger and Public Action jointly edited by Amartya Sen and Jean Drèze*. Besides offering thoughtful explanations for the real causes of famines and exposing powerful new concepts such as public endowments and human capabilities, this book introduced me to Sen's ideas on the value of freedom not just as one primary end of development, but as its principal means.

Professor, Department of Nutrition, School of Public Health
University of São Paulo, Brazil

Claudio Schuftan



I have been following the issue of nutrition and non-communicable diseases for many years now. NCDs have reached crisis level in both wealthy and impoverished countries. WHO seems just recently to have woken up to the idea that the time has come to throw yet another world conference, this time about NCDs, in the hope that the respective heroes, villains and victims will heed the wake up call, and agree – and maybe even act significantly, meaningfully and sustainably. 'So what now?' is indeed the most relevant question that delegates need to address before leaving New York. The Summit should set verifiable benchmarks for every year up to 2020, and establish an executive monitoring body with teeth, and with the courage to blame and shame – industry, governments, bilaterals, multilaterals, individuals. Do I believe this will happen, or could happen in the present political climate? I am not optimistic. But I never lose trust in civil society holding all those in the preceding list accountable. This is tough, but is an indispensable job.

1 Most powerful institution or entity

IBFAN, PHM, FIAN, Oxfam, ActionAid

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And others. There is no one pre-eminent organisation. There are a number of organisations, like the ones listed above, whose work is inspiring and influential. Here I chose the International Baby Food Action Network (IBFAN), the People's Health Movement PHM), the FoodFirst Action and Information Network FIAN), Oxfam and ActionAid. They have a herculean task to achieve, to resist 'the pull factor' from industry. I doubt that UN and other official agencies can ever be forceful and determined enough to act with the needed strength. Doesn't history prove me right? Take all the promises made by luminous past international meetings and declarations, all bearing the name of the city where they were issued in a by now geographical stale *smorgasbord*, and show me even a 25 per cent result…

2 Most powerful person or office-holder

Olivier de Schutter
The office here potentially is that of the UN Special Rapporteur on the Right to Food. *Note – potentially*. I am not a great believer in identifying individuals as having extraordinary importance. I think that we in the Association should sustain a key role in following-up on whatever promises and undertakings are made in New York. Our monthly columns, editorials and commentaries should keep the topic of nutrition as it relates to NCDs current in a militant way over the coming years. Given this, Olivier de Schutter and later holders of the offices of the UN Special Rapporteur on the Right to Food, and such-like offices, can be backed and empowered, and can be increasingly influential in places usually not accessible to us

3 Three main drivers of the NCD pandemic

Glorification of Western 'lifestyles'
Influenced by the penetration of transnational corporations offering junk food, and also a myriad of ever-changing consumables with a very special focus on youth, many of which foster extreme sedentary ways of life in children

Advertising
In the ubiquitous media, and subliminal messages in various entertainment products.

Lack of physical activity
Especially by children, youth, and the elderly.

4 Three main actions to prevent and control NCDs

I have been struggling for four decades (perhaps more) for structural changes, including those that are at the base of the NCDs pandemic, to be recognised and addressed. The world turns to the tune of a music score that is oblivious to our

appeals – although probably things would be even worse if we did not constantly agitate.

Statutory regulation of the food and drink industry
The word here must be *statutory* regulation. Let us stop the nonsense of voluntary guidelines. Look at the baby food industry's sorry record for more than half a century, and these most recent decades, and now too.

Address the social determinants of NCDs
By designing and carrying out grassroots-led actions at all levels. Here I mean the education efforts of consumers, of children, of adolescents, of women's groups. The focus is to be on the more 'upstream determinants' of NCDs. Let us stop the nonsense of addressing individual behaviour changes that ultimately blame the individuals for their preventable NCDs. Much deeper changes in our consumer society are needed if changes of behaviour are to have any lasting across-the-board impact.

Aggressive promotion of meals, and of physical activity
By 'meals' here I mean a return to family meals, with a move away from ultra-processed products. I refer you to the series by Carlos Monteiro in this journal where you can read all about what it will take to start addressing these issues. By 'physical activity' I mean all activities from walking and cycling to any form of active recreation and sport.

5 Most influential document

The International Covenant on Economic, Social and Cultural Rights
As primarily a human rights activist, I would say that this has to be the United Nations' *International Covenant on Economic, Social and Cultural Rights*, adopted by the UN General Assembly in 1966. The more specific Right to Health, Right to Food Covenants and the Convention on the Rights of the Child of course also influence my thoughts relating to the NCD pandemic. It all boils down to the realisation of people's rights, and the interference of powerful forces with those rights. My monthly columns on the Association's website show where I am coming from. As you may have figured out, I am not a full-time optimist; I am an optimist depending on the time of day…

Steering Council, People's Health Movement
Writes a monthly column for the Association's website

David Stuckler



The UN High-Level meeting is both an opportunity and a risk. It is an opportunity for raising the profile of NCDs, increasing development assistance and domestic support, and sparking a sustained global movement. Conversely, there is a risk that the meeting is co-opted by vested interests, achieves few concrete and measurable outcomes, and ultimately stymies the development of activism and outrage about the avoidable burden of NCD.

1 Most powerful institution or entity

The private sector
This mainly means those industries making products that improve or worsen risks of NCDs. They stand the most to win or lose from the outcomes of the UN Summit. Increasingly, food, alcohol, tobacco, and pharmaceutical companies look to low- and middle-income countries as their growth markets, precisely where the burden of NCDs is rising most rapidly. Their preferred outcome of the meeting is likely to be a continuation of voluntary self-regulation.

2 Most powerful person or office-holder

Ala Alwan
Assistant Director-General, World Health Organization, Department of Non-Communicable Diseases. Ala Alwan is the senior official within the most relevant UN agency concerned with NCDs. WHO gets a lot of flak but, when it comes to NCDs, the institution has been out in front. It is among the leading global-health funders of NCD prevention and control initiatives. Within the World Health Assembly, health ministers have repeatedly voiced for the need to address NCDs, and, somewhat belatedly, the organisation has begun to respond. Previous UN High Level Meetings resulted in outcomes like the creation of the Global Fund on AIDS, TB, and malaria, that have limited the role of WHO. In the case of NCDs, given the strength of vested

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interests, it is important that a publicly accountable, (relatively) democratic body, like WHO, plays a leadership role.

3 Three main drivers of the NCD pandemic

Tobacco companies
Tobacco is the world's greatest preventable cause of death. The problem is not tobacco as such, but the companies that manufacture a drug that, when used as intended, kills half its users. The Framework Convention on Tobacco Control sets out many proven, cost-effective, and even revenue-generating policy measures to curb tobacco, yet implementation has been slow despite nearly all countries in the world having committed to do so. Current negotiations in preparation for the NCD Summit have reached a stumbling block on efforts to increase tobacco taxes in low- and middle-income countries. Aggressive yet attainable targets, such as a World Free of Tobacco by 2040, could be proposed, but vested interests and their representatives preparing for the UN Meeting are blocking progress towards such accountable and measurable goals.

Producers of and investors in unhealthy foodstuffs (sugar, fat, salt, alcohol).
The dietary patterns of the populations of low- and middle-income countries are coming to depend on investment patterns in the North. The most recent example is the rapid fluctuations in food prices, driven in no small part by investor behaviour in London and New York, resulting at the same time in risks of starvation and in unhealthy diets causing obesity. Change in food supplies is mainly being driven by an industry-led push to delivery low-cost, processed foods, typically high in added sugar, fat, and salt. 'Nutrition transition' is a misleading term, as it can suggest that such unhealthy dietary trends are inevitable when, in fact, they are highly modifiable and tend to be driven by integration into global markets and inflows of foreign investment in food and beverage sectors. Tackling a fundamentally societal problem of cheap and widely available unhealthy food by asking individuals to change is bound to fail. But how can governments be persuaded to implement alternative policies given lobbying pressures from multi-national corporations and binding free-trade agreements?

Poverty
Contrary to mistaken views, NCDs are diseases of poverty. Risks of dying prematurely are greatest in the world's poorest and most vulnerable populations. The reasons are multiple and varied across regions, ranging from lack of adequate nutrition, to exposure to indoor smoke from cooking stoves. In almost all cases these can be addressed with a more equitable distribution of wealth and resources and social protection.

4 Three main actions to prevent and control NCDs

Taxation of and removal of subsidies on tobacco and sugar
Fiscal, regulatory, and legal initiatives – the main point of contention in current debates. They work. They raise revenue (up to a point), and tobacco companies hate them (a sure sign of their effectiveness). Smuggling is a concern, meriting its own response, but is no justification for inaction. Sugar-sweetened products are significant drivers of both obesity and diabetes, especially among kids. The full social cost of sugar should be reflected in its price. Too often these prices are artificially low through a combination of sugar subsidies and overproduction (leading to 'export dumping').

Discovery of industry documents
One crucial step in building a movement for action on tobacco was not the discovery of the cancer-tobacco link, or even evidence about the economic costs of tobacco, but the lies and manipulation of consumers by the tobacco industry. Similar knowledge from food and alcohol companies could prove crucial in re-framing debates about NCDs as a matter of social injustice and one that requires a collective movement. Eventually a WikiLeaks release will turn up, but could the process be speeded up?

Global social protection
Japan, Sweden, Cuba, and Finland have relatively low rates of NCDs for their level of economic development. One factor is generous investment in social support and welfare. These help people through hard times (reducing risks of drinking dangerously and poor mental health) as well as good ones (creating sites of social integration; providing more leisure time and reducing stress). Social protection also provides a shield for people from the potential harms of unfettered markets and market liberalisation. Inside our countries, we put in place social safety nets. Today's threats are truly global; yet in most low- and middle-income countries protections are limited, and often built through a patchwork of private, voluntary aid. One starting point might be to create 'fiscal space' for governments. As one example, free-trade agreements and debt-relief packages could leave scope for social protection for health as an exception to neoliberal policies (including privileging access to generic medicines as well as healthier foods while providing greater scope for tobacco tariffs and taxes).

5 Most influential document

Steven Epstein. Impure Science
AIDS, Activism, and the Politics of Knowledge. University of California Press, 1996. Many scientists sometimes have the naïve view that a combination of evidence on the health impact and economic costs of interventions will drive 'political will' (a highly misleading term). This just isn't how politics works. Readers will benefit from spending an afternoon with Epstein's history of the most important global health

movement of the past two decades. And, let me also suggest, as a shameless piece of self-advertising, Chapter 5 parts I and II, 'Political economy of chronic disease' and 'Creating a social movement to raise priority of chronic disease' in my forthcoming OUP book, *Sick Societies: Responding to the Global Challenge of Chronic Disease*.

Formerly at the Harvard School of Public Health,
now at Cambridge University

Geoffrey Cannon



Individual choice is not where it's at. The most powerful drivers of food systems and supplies, and therefore of dietary patterns, and of related disease, disability, health and well-being, are social (including political), economic, and environmental in nature. Among these, the most powerful current drivers of the pandemics of chronic diseases – and, it should be said, the persistence of food insecurity, infections, deficiencies, hunger and starvation – are political. Research into prevalence of disease that pays no attention to the determination of patterns of disease is academic in the derogatory sense. Guidelines and advice on nutritional and other ways of life at best will do something to help those sections of populations already best able to help themselves, and is likely to distract from the main issues. This I say as somebody who has been dishing out such advice for 30 years. This explains the nature of my responses below.

1 Most powerful institution or entity

World Economic Forum

The annual global and other regional and specialist meetings of the World Economic Forum are the key meeting places for the chief executives of transnational corporations, with heads of state, heads of the UN and its agencies, heads of private foundations, and other shapers of world affairs. The public world is going broke because the whole world is rapidly moving into private hands. In recent years the WEF has worked aggressively to promote 'public-private partnerships' designed to

determine and implement global policy on public health nutrition, and has effectively infiltrated and even captured its public 'partners'. The agenda for control and prevention of chronic diseases set for the UN Summit is much the same as that previously worked out by the transnational food and drink processors and their representative and associated organisations, of which the WEF is pre-eminent.

2 Most powerful person or office-holder

Bill Gates
He is the obvious choice if the area of concern was classic malnutrition, and is also the correct choice here. The Gates Foundation is 'driven by the interests and passions of the Gates family'. It is the second bigger funder of WHO, and its income is greater than that of WHO. With the acquisition of the Hathaway holdings donated by Warren Buffett, it is becoming the biggest single shareholder in Coca-Cola and Kraft Foods. Bill Gates himself has gained the reputation of the global 'good Samaritan' (to quote the 2008 *Time* magazine cover), but has not undergone any Damascene conversion. His values remain the same as those he developed at Microsoft. He is known to be aggressively critical of anybody whose views are not his. He can and does personally decide to put $US billions into any project he likes, and as a result is able to dominate any discussion on public health including food and nutrition policy. He is zealously committed to 'public-private partnerships', in which private interests call the shots,

3 Three main drivers of the NCD pandemic

'Red in tooth and claw' Social Darwinist laissez-faire capitalism
Its reinstatement since the 1980s. This is the overall driver. Its rationale, the so-called 'neo-liberal' political philosophy, itself derived from the ideology of individualism, includes the mission to privatise public goods, including public health.

Destruction of statutory regulations
The protection and improvement of public health and of public goods generally, always involves the use of law. This is a rule to which there is no exception.

Transnational industries
The dizzying rise beginning in the 1980s of corporations best seen as Big Tobacco, Big Sugar, Big Snack, Big Booze, and their representative and associated organisations.

4 Three main actions to prevent and control NCDs

Political and economic systems dedicated to increase justice and equity
Actions that derive from recognition that *laissez-faire* capitalism is wrong, in the senses both of being a mistake and also being immoral, and its replacement by humane

systems, which can be capitalist, socialist, or of other types. This move is gathering force in an increasing number of countries. As part of this, the imposition of statutory regulations at international and national level that prevent 'free' – meaning chaotic – capital flow and flight, and that protect established (including indigenous and traditional) food systems and supplies – crucial in those parts of the world whose systems are not yet fully industrialised.

Healthy food systems, supplies and meals
Meaning, those in which fresh and minimally processed foods and food ingredients are dominant. This principle should guide all food and nutrition policies and actions. A more specific action, which follows the series of commentaries by Carlos Monteiro in *WN* published since last November. Dietary patterns that are most likely to protect against chronic diseases are those that are made up of fresh and minimally processed food, together with industrial and culinary ingredients, and that include small or preferably minimal amounts of ultra-processed ready-to-eat or to-heat 'fast' energy-dense fatty, sugary or salty dishes, snacks, drinks and other products. Achieving this will among other things require the use of law. All significant improvements in public health, and safeguarding of public goods, requires and involves the use of law.

Suppression of the tobacco industry
Any list of actions to prevent NCDs must include this. No need to repeat the reasons given by others.

5 Most influential document

Tony McMichael: Planetary Overload
Global Environmental Change and the Health of the Human Species. Cambridge: Cambridge University Press, 1993. Staying with our topic of chronic diseases, as conditions of deficiency of good stuff as well as of excess of bad stuff, and if the criteria include number of times opened and the number of stickies inserted on key passages, Tony McMichael's first book has to be my first choice. As a slight cheat I'd like also to mention Susan George's *How the Other Half Dies. The Real Reasons for World Hunger*; Tim Flannery's *The Eternal Frontier. An Ecological History of North America and its Peoples*; Colin Tudge's *Future Cook*; and Jared Diamond's *Collapse. How Societies Choose to Fail or Survive*, despite his incredibly optimistic conclusions. For me Tony, with his mastery of 'the big picture', is pre-eminent.

Chief editor of the 2007 WCRF/AICR report,
Food, Nutrition, Physical Activity and the Prevention of Cancer
Writes a monthly column for the Association's website

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Philip James



We are I think being asked to focus on the actors and institutions which can drive the implementation of NCD prevention policies. However, the political reality, as witnessed by the battle taking place as I write over drafts of the UN Summit Political Declaration, is that colossal forces are doing everything in their power, which includes their control of most governments, to protect their interests. These are the tobacco, alcohol and food processing and associated industries, such as those concerned with advertising and public relations, and also – it needs to be remembered – the finance industries. All operate ruthlessly for their own interests. These usually (but not necessarily always) conflict with public health. Here I consider the positive forces needed to overcome these huge barriers.

1 Most powerful institution or entity

The World Health Organization

WHO is potentially the most powerful institution. The Gates Foundation is the most powerful influencer of governments, WHO and other agencies promoting public health, but its approach is wholly dependent on the view of Bill Gates and his family, who see the value of brilliant technical fixes for solving problems, and have until recently absolutely gone against any involvement in NCDs. They are now shifting their views but will, if involved, go for the poly-pill fix approach rather than true public health nutrition measures. *The Bloomberg Foundation* is more modestly funded but brilliantly focused on public health, and recently has been effective in smoking and road traffic accident measures. However, when Gro Harlem Brundtland was director-general, WHO introduced the first ever international law – related to smoking – and her predecessor Halfdan Mahler (a fellow Scandinavian) introduced the universally accepted Alma-Ata Declaration on health for all as a human right. So the potential leadership role of WHO is immense. But this depends on the character and the political skills of its director-general and its senior executives.

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2 Most powerful person or office-holder

Zsuzsanna Jakab, regional director of WHO (European Region)
She is an immensely intelligent new regional director with a clear understanding of the fundamental processes underlying non-communicable diseases. She has a broad academic background with training in political science and at the Nordic School of Public Health. On meeting her recently I was reminded that she had been the local organiser of the first ever WHO EURO conference of Ministers of both Agriculture and Health which I opened in Budapest (in the Opera House!) several decades ago. This dealt with entire food systems and their historical drivers. Through WHO EURO, and with the backing of several sophisticated European governments, she is able to set a new template for real public health developments in NCD prevention, which could then be used globally. New regional directors of the Pan American Health Organization and of the Eastern Mediterranean Region are about to be appointed, and these newcomers may amplify the action. But I reckon that Europe will be the locus for coping with the international forces inducing the epidemic of NCDs.

3 Three main drivers of the NCD pandemic

The 'free market' demand for ever increasing profits by any legal means
This applies to all companies with shareholders. The concept pervades the whole food, alcohol and tobacco sectors, with the global advertising world locked into the same process. Thus for example Indra Nooyi, the current CEO of PepsiCo, is now facing criticism from shareholders – and also Pepsi bottlers – for not focusing on selling more sugar-laden soft drinks and fast foods in the US and instead concentrating too much on healthier products. The approach of the CEO of Novo Nordisk several years ago, to use half of net profits (from diabetes treatment) to support diabetes prevention, with the backing of both the Board and shareholders, is exceptionally unusual.

Post- World War Two food policies and programmes
These were based on pre-war findings that stunting, anaemia and ill health were associated with a poor diet in poverty-stricken cities of Britain, together with HC Corry Mann and John Boyd Orr's findings that growth spurts could be induced by animal protein, and weight gain by energy-packed foods. This led during the war and then globally to the general acceptance even up to the 1970s by governments, industry and the scientific community, that fat, butter, milk, sugar and meat were all vital foods, with no limits being set, and the apparent need to produce them as cheaply as possible so that low-income and impoverished communities and families could afford them. This was the most brilliantly successful public health nutrition policy ever devised in modern times. It has had a pervasive influence on food and national security programmes ever since. The implications for chronic diseases are now apparent. This

illustrates the need for all of us concerned with public health nutrition to be exceptionally careful to think through the possible unintended consequences of seemingly successful public policies.

The biological lock-in of our taste receptors

Humans have taste receptors for essential fatty acids, cooked meat (the *umami* receptors), sweet receptors as a primitive index of energy deprivation, and salt receptors because of limited availability during the evolution of our species in Africa. These are locked into our pleasure centres. Thus the new scanning techniques of flavour-induced pleasure centre activity already used by the alcohol industry to transform young women into heavy drinkers, and now to lock in fast foods as a nicotine-like addictive response.

4 Three main actions to prevent and control NCDs

An action plan based on all key factors that affect food, nutrition and health

That is, a clear, coherent and well-reasoned plan designed to induce changes in control of production, access to, pricing and promotion of commodities and foods, with public health as the first principle. WHO reports are almost all written by nutrition experts who have little or no training in or understanding of economics and its implications for policy making. The 2010 OECD report, *Obesity and the Economics of Prevention,* needs to be taken further and applied to NCDs as a whole. Thus, for example, a set of arguments is needed for invoking the SPS (sanitary and phytosanitary) sub-clauses of World Trade Organization agreements that allow banning of trade in dangerous materials. This approach has already been used to cope with the BSE crisis in Europe: a 16-person expert group set out terms which altered billions of dollars of trade per year in favour of public health. The case needs to be made to see saturated (not just *trans*) fat as in the same category as arsenic. At the moment nutritional components are ludicrously seen as a matter of food choice. But nutritional imbalances are a far greater hazard than problems of food safety. To establish appropriate standards, a universally applicable nutritional profiling system is needed, designed to minimise the presence in food systems of fat, saturated fat, sugar, and salt. The same approach can be used to increase the presence of foods rich in nutrients.

Government at all levels should not allow inappropriate food or drink in any publicly funded premises

The provision of all meals, snacks, foods and drinks in public places should be made to comply with optimum nutritional criteria. These should be based not on US or UK norms but on global needs and local realities, introduced with 3-5 year timelines and specific progressive targets. The progressive staged approach would induce a major economic drive for new food formulation, with huge implications for agriculture, whose current methods are completely unsustainable as now recognised

by several prestigious international bodies, as for example IAAST (*the International Assessment of Agricultural Science and Technology)*. Big businesses with concern for their workers' health would also be encouraged to take this on board which adds another driver to food chain changes.

Develop a policy forum for coordinated education of the NCD Alliance
And in so doing, involve some key policy influencers, such as the *'Copenhagen Consensus* economists, so that screening and early treatment are no longer perceived as the limits of 'prevention'. This could be seen as just another talking shop. But influential established players need to see the whole picture and the need for fundamental societal changes. Otherwise we may have to rely on activists, like those in the environmental movement, to teach us how to become proper advocates.

5 Most influential document

Ezzati M, Lopez AD, Rodgers A, Murray C (eds) Comparative Quantification of Health Risks
(Two volumes) WHO: Geneva, 2004. There is a simple summary in *The Lancet*: Selected major risk factors and global and regional burden of disease. *The Lancet* 2002; **360**: 1347-60. For the first time, this establishes the importance of global nutrition on a quantitative basis. It shows that nutritional issues are the greatest cause of disability and premature death globally, with both wealthy and lower income countries dramatically affected. This analysis was counterfactual, meaning that it defined for the first time the extent to which prevailing health conditions differed from the optimum for health. They were not pragmatic politically acceptable targets. This means that the professional of public health nutrition as currently constituted is likely to be taken over by the mainstream of physicians, scientists, and policy makers. At least though, governments will be forced at least to acknowledge the problem.

President of the International Association for the Study of Obesity
Chair of the WHO study group responsible for its 1990 '797' report,
Diet, Nutrition, and the Prevention of Chronic Diseases

Ricardo Uauy



The UN NCD summit is a unique opportunity to examine progress in the promotion of healthy diets and active lives in the fight against NCDs. Much has happened in the decade since the WHO/FAO expert consultation of January 2002, in which I played a part. This led to the 2003 '916' report on *Diet, Nutrition and the Prevention of Chronic Diseases,* which confirmed that the right approach is to prevent major NCDs considered as a whole, and thus became a foundation for this month's summit. During the years when Gro Harlem Brundtland was director-general, and Derek Yach and Pekka Puska headed the division responsible for NCDs, WHO played a proactive role in creating the conditions for progress at the international level. These efforts were clearly noticed. The backlash came swiftly, as was expected. It came not directly from the industry sector that produces processed foods, but from producers of commodities, most notably sugar, that have enormous lobbying and political power. Major countries, including the US government of the time, launched a crusade that led almost to the collapse of the *WHO Global Strategy on Diet and Physical Activity*. Commercial interests thwarted public health efforts, and derailed much of the WHO work. Gro Harlem Brundtland was replaced by more complacent leadership. Pekka Puska returned to Finland after failing in his bid to become WHO director-general. Derek Yach was demoted at WHO, initially found a job in academia, and later greater comfort in private industry. Things are clearly different now at WHO. There is more paperwork, more lengthy documents, more careful wording – but less action. And it seems unlikely that FAO will do much to change its present focus of food security. Its focus still remains 'if we only had enough food'.

1 Most powerful institution or entity

None

I do not see a single institution able to muster what it takes to drive international and national actions. National governments will continue to be challenged by the economic crisis, and the demands for freer trade and less regulation of the private sector. Nor are there any really strong civil society institutions that can take up this

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challenge internationally and succeed. My hope is that civil societies at national level will rise to the challenge, and demand effective policies from their representative parliaments, which lead to action and national level to curb NCDs.

2 Most powerful person or office-holder

None
This is the time for social activism, not single individuals. Elected officials need to be held accountable for what they achieve or fail to achieve.

3 Three main drivers of the NCD pandemic

Unhealthy diets, with too much sugar, sodium, and junk food.

Sedentary lives, involving cars, sedentary entertainment, inadequate public transport, sedentary schools.

Present economic interests. The proposed changes in diets challenge the current business model of agricultural production, food processing, marketing and sales.

4 Three main actions to prevent and control NCDs

Just one, above all. Citizen movements that act strategically and that address the drivers of the NCD pandemic. Without them all else will fail.

5 Most influential document

Diet, Nutrition and the Prevention of Chronic Diseases
World Health Organization Technical Report 916. Geneva: WHO, 2003. Together with the deluge of documents, declarations and policy discussions *Diet, Nutrition and the Prevention of Chronic Diseases* generated. Having been a part of the process of scientific discussion, and the writing and final editing of the '916' report, it continues to raise my political awareness and intensify my desire for action.

Chair, WHO/FAO consultation responsible for its 2003 '916' report,
Diet, Nutrition, and the Prevention of Chronic Diseases
President of the International Union of Nutritional Sciences, 2005-2009

Sabrina Ionata



The pandemic of non-communicable diseases is no surprise. If nutrition is not set as a development priority, with appropriate targeting of interventions, multisectoral policy approaches, adequate financial investment, and high level political commitment, malnutrition in all its forms (under-nutrition as well as over-nutrition) will never be properly tackled. Unfortunately, the international scenario is still one of worsening hunger and under-nutrition, which continues to be the focus of attention. The lack of attention to obesity and related non-communicable diseases is then to be expected. It is not too late, though.

1 Most powerful institution or entity

The World Health Organization
WHO has a crucial strategic role. It is the international authority on health, with the capacity to bring together the latest and most reliable scientific evidence and provide guidance to countries, once a public health area is identified as a priority issue. Successful examples include tobacco and HIV. This now can include non-communicable diseases.

2 Most powerful person or office-holder

Heads of state or prime ministers in every country
The single person that should have the most influence is the major office holder in every country. The main authority and responsibility does and should rest with them and with nation states, rather than an international person or office. Without national government commitment and public policies in place, the NCD pandemic will never be addressed properly, regardless of the quality of guidance and support received from international bodies. National governments need to recognise their strategic role in combating non-communicable diseases and investing in nutrition.

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3 Three main drivers of the NCD pandemic

'Postmodern lifestyle'
We are way past the values of modernism. We live now in a digital world that is out of touch with nature and the simple things in life. So many children now think that milk comes from tetrapaks and that vegetables come from vacuum frozen packets. This rising generation and its children will be vulnerable to non-communicable diseases in ways that we are not able to foresee now, for we cannot see where technology and societal changes will lead us.

Ultra-processed products
Unhealthy eating, and the profit in adding economic value to cheap unhealthy ingredients, will certainly take its toll. Healthy food makes less money, unless it is given added value by 'organic' and such-like claims. People continue to un-learn how to cook, how to share meals (unless a frozen pizza), and how to exercise in daily tasks or in work-related activities.

Climate change
We cannot yet know what impact climate change will have on food systems and supplies and therefore on what populations consume, but we can already be pretty sure that the impact will be profound. We are not prepared. Some papers are appearing in the literature linking climate change and obesity – and vice versa – but the evidence is indirect and limited. Impacts on food preferences, traditions, ways of life, migrations, displacement remain unknown. It is though, highly likely that the South, impoverished populations, and young people, will be most affected.

4 Three main actions to prevent and control NCDs

Clarify the relationship of key actors
Including roles and responsibilities of governments, civil society and the private sector, and what measures each can and need to take, to ensure that the prevalence of NCDs is controlled. This may include voluntary agreements as well as regulation.

Effectively promote healthy eating
Nutrition education is often discredited, because of generalised use of methods that do not take into consideration the backgrounds and context of people, families and communities, and because of lack of proper evaluation of effectiveness of such interventions. Effectively to promote healthy eating and healthy ways of life, it is crucial to invest in new methodologies for nutrition education that are based on democratic and ethical values.

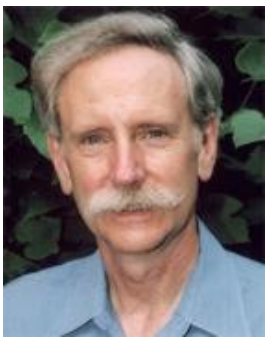
Understand and mitigate the effects of climate change on health

More research is needed to support policy-making processes on climate change adaptation and mitigation to promote health, with the appropriate mainstreaming of nutrition as a crucial area for investment. Climate change on its own will not determine the health and food and nutrition security status of populations, but the momentum created around it and the international attention it raises could be a catalyst for health actions towards better nutrition and prevention of NCDs.

5 Most influential document

The Global Strategy on Diet, Physical Activity and Health
Geneva: WHO, 2004, available at:
http://www.who.int/dietphysicalactivity/strategy/eb11344/en/index.html)
It puts the prevention of NCDs in a whole public health context, Within health it has brought together factors such as dietary intake, levels of exercise, and overall ways of life. The Strategy has raised consciousness and started movements worldwide.

Walter Willett



Most countries are facing a massive epidemic of NCDs. Part of this is due to improvements in the control of infectious diseases of childhood and of childhood under-nutrition, and we should be celebrating this. However, after accounting for this, there are also major increases in age-standardised rates of NCDs, including heart disease, diabetes, and many cancers. The main underlying reasons for the epidemics are increases in use of tobacco, reductions in physical activity, and adverse changes in diet. The last two changes have resulted in massive increase in obesity in most countries. Many of the consequences of reduced physical activity and adverse dietary changes are mediated by the insulin-resistance syndrome, a precursor of diabetes and a risk factor for many other NCDs. Most of the world's populations appear to have substantially greater susceptibility to the insulin resistance syndrome compared to European and North American populations, where diabetes rates are already high and increasing. This has profound public health implications; it means that rates of

diabetes and related conditions will be at least 2-3-fold higher than in North America if the same unhealthy diet and lifestyle factors continue to be adopted.

1 Most powerful institution or entity

None
There is no institution that we can rely on for leadership in controlling the epidemic of NCDs. The World Health Organization and most national governments are too influenced by powerful economic interests to be reliably supportive, but every effort should be made to engage them in leadership roles. In the US, the most effective leadership has been at the city level, particularly New York City and Boston, and their actions have had national effects.

2 Most powerful person or office-holder

Michael Bloomberg (in New York City)
The most powerful leaders have usually not had public health as a priority. In the US, the most influential office-holder in relation to NCD prevention is Michael Bloomberg, the mayor of New York City. He is a public health visionary who understands the role that government and policy can have in promoting health. His actions have included banning smoking in restaurants and other public places, banning *trans* fat in food services (which has had a national effect), changing the physical infrastructure to promote biking and walking over automobile use, and using the purchasing power of the city to reduce sodium in foods.

3 Three main drivers of the NCD pandemic

These are tobacco, reduction in physical activity, and adverse changes in diets. These all have factors in common – a convergence of human vulnerability, and corporate drive for profit. Tobacco is addictive, and huge profits can be made by addicting populations and marketing tobacco. Humans have a tendency to conserve energy by reducing activity, and huge profits can be made by the automobile and the oil industries exploiting this. We all have innate senses for sweetness, salt and food energy that can be exploited commercially in ways that have similarities to tobacco addiction. In each of these areas, the industries conduct extensive research better to exploit human vulnerabilities, and they have steadily become more effective in relation to human vulnerability, which does not change with time. Further, they have corrupted governments and government agencies, such as the US Department of Agriculture, so that these support corporate interests over the public's health.

Tobacco
This until now has been the single most important cause of NCDs on a population basis. For the smoker, it is an even more important risk factor.

Reduction in physical activity
This has been the next most important factor. It is due to a change in work-related activity, changes in transportation to automobiles, and large increases in television watching.

Adverse changes in diets
These are also contributing greatly to the epidemic of NCDs. As with inadequate physical activity, the effects of unhealthy diets are partly but not completely mediated by massive increases in overweight and obesity. The changes in diets are complex because they relate to both the quality of diets (increases in refined grains and sugar with reductions in whole grains, reductions in fruits and vegetables, increases in salt and partially hydrogenated fats, and increases in red meat in wealthy groups) and quantity (which is in part driven by the very low costs of refined starches and sugar relative to other foods).

4 Three main actions to prevent and control NCDs

Control tobacco
Governments must take strong actions to control tobacco use by adopting the WHO Framework Convention on Tobacco Control. The means to control tobacco use through education, restriction of use, and taxation, are well documented. Lack of political will is the only obstacle.

Create an infrastructure to promote physical activity
Governments must play a leading role in promoting physical activity by creating a physical infrastructure that provides safe and attractive facilities to walk, ride bicycles, and play. Also, creating a public transportation system rather than primarily supporting automobile transportation is essential

Promote healthy diets
Because of the complexity of diet and eating behaviours, the promotion of healthier diets is also the most complex, and will require a many-faceted, multi-sectoral approach . This will include education in schools, worksites, health care facilities, and the general media, restriction on the promotion of unhealthy foods to children, and economic policies to support healthier rather than unhealthy choices. In the US and many other countries, reduction of sugary beverage consumption should be at the top of the list of specific targets.

Most influential document

The Surgeon General's Report on Smoking and Health
Washington DC: Department of Health and Human Services, 1964
Progress in the control of NCDs has been based on many research reports, literature reviews, and recommendations by groups of experts. However, the single most influential document has probably been the *1964 Surgeon General's Report On Smoking and Health*. This was the first major statement by a group of experts to conclude that smoking was a cause of cancer, that an important NCD (lung cancer) could be largely prevented, and that government should play a major role in prevention. This has provided a model for other NCD prevention efforts and has led to large declines in lung cancer incidence in the US and some other countries.

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