WN *Update*

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Editor's note



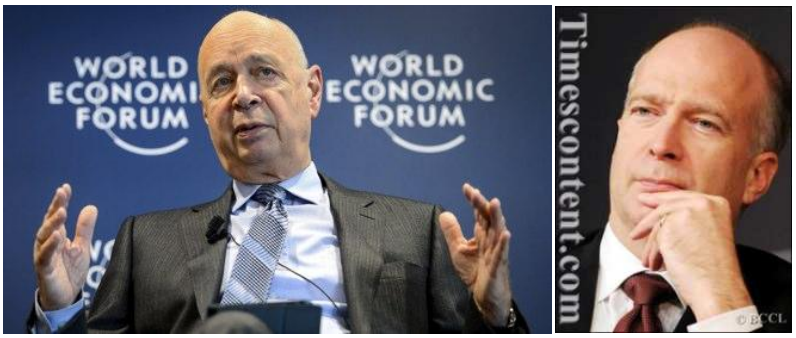
For our cover feature *Updates* on sugar, including the indictment of sugar and the story of the launch in the UK of *Action on Sugar*, see below, on pages 116-128.

World Economic Forum
Masters of the universe worry about inequity, suggest going easy on salt and sugar



BIG FOOD WATCH

Access June 2011 Claudio Schuftan on food prices and food wars here
Access December 2013 Update. The WEF big business band plays on here



Klaus Schwab of WEF left) feels that inequity has gone too far. Robert Greenhill of WEF (right) suggests personalised medicine aided by food labelling as a key to health and a spur to global growth

The Update team reports:

The 'masters of the universe' are the white wealthy Western middle-aged businessmen (and some women) whose aim is to take over world governance, over-riding democratic and accountable governments and institutions, so as to make their corporations and themselves more profitable and powerful (1).



Davos masters of the universe were accommodated at the Intercontinental Resort and Spa (left); those who are so far mastered rioted in Occupy Wall Street actions and worldwide manifestations

Collectively they are able to do so. Their unbridled and reckless actions explain the finance, fuel and food crises (2). Their annual meeting in Davos was on 22-25 January. Its topic was 'The Reshaping of the World: Consequences for Society, Politics and Business'.

The general theme of the meeting seemed to be that reconstruction, economic growth, and increased value of investments, are now in safe transnational hands. Klaus Schwab, World Economic Forum president (above, left), is pleased with the newly opened Davos Intercontinental Resort and Spa (above, left), described by its designer as a 'soft shaped UFO', built with a $US 150 million investment from the Credit Suisse bank, with suites at $US 1,500 a night. He said that he was worried about inequity, as he tends to do at WEF meetings (1). The whole idea of the 'free market' system, he explained, is to make everybody prosperous, but 'We have too large a disparity in the world; we need more inclusiveness… If we continue to have un-inclusive growth and we continue with the unemployment situation, particularly youth unemployment, our global society is not sustainable'. Who he meant by 'we' was not clear.

All over the world people are protesting against the corruption of governments and corporations, as in the Occupy Wall Street riots (above right). Klaus Schwab's worry is expert opinion-based. Surveyed for the WEF meeting, 700 specialists have decided that the gap between rich and poor is the big risk to the world in 2014. Here, 'world' seems to mean business as usual. The experts warned of a 'lost generation' of young people who have no jobs, skills, or hope, fuelling frustration liable to turn into social upheaval. The WEF chief economist explained that this 'can lead to the dissolution of the fabric of society, especially if young people feel they don't have a future. This is something that affects everybody'. Here 'everybody' seems to include masters of the universe, who in previous centuries were dispossessed in bloody revolutions (3).

Individual life-style health care

Robert Greenhill, WEF managing director since 2008, is a Canadian previously president of Bombadier International, that makes Lear and other executive jets, some of which no doubt transport participants to Davos. In 2006 the then UN secretary-general Kofi Annan appointed him to a UN high-level panel on systems coherence, and the Bill Gates blog identifies him as a fellow 'impatient optimist'. For Davos 2014

he had a vision of health, which included salt, sugar and food labelling (4). He explained that this year's participants had been given apps that 'tell their smart-phones' (and presumably the humans too) 'if they're walking far enough or getting enough restful sleep'. The idea was to raise personal health consciousness.

A high-level, cross-sectoral conversation

He explained. 'Our concept of healthcare has become too narrow. Too often we see the job of health systems as mending people when they get ill, instead of giving them the tools to stay healthy. We delegate the problem to ministries of health, rather than creatively engaging other public and private organisations to promote health. From regulating particulate emissions, to encouraging cutting down on sugar and salt, to addressing stress in the workplace, the possibilities are endless… We need to elevate health to a high-level, cross-sectoral conversation that informs every decision a society makes. How to design our cities? How to transport ourselves? How to produce, label and market our food? How to generate energy without polluting our air? These decisions should be guided by a health perspective'.

He then got down to the nitty-gritty, confirming the alliance between Big Business and Big Science. This excites governments, generates unlimited investment of tax-payer's money, does wonders for gross national products, and produces results that may enhance the health and prolong the life of people whose life-style includes Davos Intercontinental Resort and Spa tabs charged to expenses. 'Recent years have likewise seen breakthroughs in personalised medicine, which will increasingly enable the re-personalisation of healthcare….As genomic understanding becomes more nuanced and testing more accessible, we will get more personalised advice on how each of us can best maximise our health'. 'We' and 'us' here, is clear.

A US presidential candidate once pledged 'a chicken in every pot'. It seems that the big new idea is 'a pedometer in every phone'.

Rights, riots and revolutions

Claudio Schuftan, a regular contributor to *WN,* is also a physician committed to primary health care affordable by all. He comments: 'One reason for popular uprisings throughout the world is food insecurity. Basic food is increasingly unavailable or unaffordable. This is because food prices are now in the hands of commodity speculators (2,3). I see no mention of this in the Davos proceedings.

He continues: 'I wish I could say that the people who gather at Davos to mastermind "the reshaping of the world", live on a different planet from the rest of us. Unfortunately, they do not. They live on our planet, and they have grabbed almost all its resources. If only the Davos Intercontinental Resort and Spa really was a UFO! It could then transport Klaus Schwab and all his associates to the planet Xyzlon, and

enable those who respect planet Earth to reshape systems of governance, democracy and participation, starting with the dispossessed. Salt, sugar and labels are incidental. What is needed is justice and equity. As warned in *World Nutrition* (3), and as the Davos experts warn, if these rights are not granted, they may be seized'.

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*Anon. Big Food Watch. World Economic Forum. Masters of the universe worry about inequity, suggest going easy on salt and sugar. [Update]. World Nutrition February 2014, **5**, 2, 110-113*

Oxfam. Inequity

Masters of the universe pressed to pay tax and to support protection of public goods

Access this issue Feedback Claudio Schuftan on Bill Gates here
Access January 2014 Oxfam report on injustice and inequity here



Half the world's money is now owned by 85 people. All of them could easily fit into a London bus. Above: Oxfam executive director Winnie Byanyima, and head of research Ricardo Fuentes-Nieva

Winnie Byanyima (above, left), who since 2013 has been Oxfam executive director, participated at the 2014 World Economic Forum meeting. She came with a message, from the new Oxfam report *Working for the Few: Political Capture and Economic Inequality,* published in time to confront the masters of the universe gathered in Davos (1). Referring to money, she said: 'It is staggering that in the 21st century, half of the world's population – that's three and a half billion people – own no more than a tiny elite whose numbers could all fit comfortably on a double-decker bus' (2).

Authors of the report are Oxfam director of research Ricardo Fuentes-Nieva and head of income disparities Nick Galasso. The report says: 'Unless bold political solutions are instituted to curb the influence of wealth on politics, governments will work for the interests of the rich, while economic and political inequalities continue to rise. As US Supreme Court Justice Louis Brandeis said: "We may have democracy, or we may have wealth concentrated in the hands of the few, but we cannot have both".' The report includes a case study of the Mexican Carlos Slim, who in recent years has been identified as the world's wealthiest person, along with Bill Gates (3).

Winnie Byanyima was one of the small proportion of women and the small number of African nationals at Davos. She called on the WEF participants, and other rich and powerful corporations and individuals not present in Davos this year, to:

- Support progressive taxation and not dodge their own taxes
- Refrain from using their wealth to seek political favours
- Disclose their investments in companies and trusts
- Press governments to use public money for universal healthcare, education and social protection
- Insist on living wages for all workers in companies they own or control
- Challenge the rest of the super-wealthy to join them in these pledges

Box 1

Oxfam on injustice and inequity

This is an edited extract from the January 2014 Oxfam report (2).

When left unchecked, the effects of massive inequity of money and power are potentially immutable, and will lead to 'opportunity capture' in which the lowest tax rates, the best education, and the best healthcare are claimed by the children of the rich. This creates dynamic and mutually reinforcing cycles of advantage that are transmitted across generations. Given the scale of rising wealth concentrations, opportunity capture and unequal political representation are a serious and worrying trend. Data taken from reports prepared by financial and economic institutions show that:

- The 85 wealthiest people in the world own $US 1 trillion (thousand billion). This is as much as the 3 billion 'bottom half' of the world's population with lowest incomes.
- The 1 per cent wealthiest people in the world own $110 trillion. That is 65 times the amount of income of the bottom half of the world's population.
- In the US, the wealthiest 1 per cent captured 95 percent of post-financial crisis growth since 2009, while the bottom 90 percent became poorer.

This massive concentration of economic resources in the hands of fewer people presents a significant threat to inclusive political and economic systems. Instead of moving forward together, people are increasingly separated by economic and political power, inevitably heightening social tensions and increasing the risk of societal breakdown.

The Oxfam report shows that rapidly widening inequity and increased relative and absolute poverty have been driven by a 'power grab' by wealthy elites, who have manipulated the political process to rig the rules of the economic system in their favour. Over the past few decades, corporations and wealthy individuals have skewed public policies in their favour on issues ranging from financial deregulation, tax havens, anti-competitive business practices, and lower tax rates on high incomes and cuts in public services for the majority. Since the late 1970s, tax rates for the richest have fallen in 29 out of 30 countries for which data are available.

Winnie Byanyima said: 'Widening inequality is creating a vicious circle where wealth and power are increasingly concentrated in the hands of a few, leaving the rest of us to fight over crumbs from the top table…We are increasingly living in a world where the lowest tax rates, the best health and education and the opportunity to influence are being given not just to the rich but also to their children… In too many countries economic growth already amounts to little more than a "winner takes all" windfall for the richest'.

Box 2

UK food poverty means no money to cook food

In the UK the number of 'food banks', successors of the 'hungry 30s' soup kitchens, have increased from 22 in 2007-08 to 100 in 2011 to 400 in 2013, now visited at a rate of about 500,000 people in a year. As relative and absolute poverty deepens in the UK, food banks are handling a new crisis. An increasing number of people now have no money for gas or electricity with which to cook food. The solution is to give them 'kettle boxes'. These contain products that can be heated with the addition of boiled water, like instant soup, pot noodles, instant mash and just-add-water porridge, as well as crackers, breakfast cereal and tinned food. For even more destitute clients, a 'cold box' has been created, containing three days' supply of tinned or packaged products that can be prepared without the need for heating or hot water, such as long-life milk, breakfast cereal, tinned sweet-corn, tinned potatoes, tinned corned beef, tinned rice pudding, fruit juice, cream crackers, biscuits, jam and peanut butter (4).

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Sugar

What sugar does to you: the indictment

Access September 2013 Credit Suisse report Sugar at a Crossroads here
Access December 2013 PLoS Medicine on conflicts of interest here
Access January 2014 Update on WHO added sugar recommendation here
Access January 2014 Update on sugar here



Sugared ultra-processed products are everywhere. Breakfast cereals with health claims aimed at children in a US supermarket (left). Coca-Cola vending machines at the Beijing Olympics (right)

The Update team reports:

Suddenly there is a new radical mood against sugar. This is apparent even within medical and allied professional organisations that up to now have avoided statements critical of sugar liable to be challenged as 'pushing the science'.

But now a dam has burst. 'Sugar is as dangerous as alcohol and tobacco', 'Sugar is the new tobacco', and 'Sugar is enemy number one for causing diabetes and obesity'. These are not wild-eyed claims from internet bloggers. They were vivid UK national newspaper headlines on 9 January (1-3), accurately quoting statements made by physicians and health professionals from the new pressure group Action on Sugar (AoS), launched in London on 9 January (4). They followed a series of indictments of sugar from various quarters including the global bank Credit Suisse, summarised in *Update* last month (5-11). In the UK a range of national newspapers, from *The Times*, *The Sunday Times, The Guardian*, *the Observer* and the *Daily Telegraph*, to the *Daily Mail* and the *Daily Mirror*, all now regularly publish blasts against sugar.

Do strong statements like 'sugar is the new tobacco' have resonance outside the UK, notorious for its appalling rates of childhood obesity, its generally rather disgusting diet, and the evident indifference of a government basking in the success of the Coca-Cola and McDonald's-sponsored Olympics? Do people generally believe that sugar is dangerous? Besides, is it right to attack sugar? What's the story? We begin this *Update* by summarising the indictment against sugar (and for what 'sugar' means, see Box 1, below). We then give an account of AoS and the UK reaction.



Sugared products. Ice-cream made by transnationals like Unilever (left) has penetrated global markets as here in Brazil (left); and (right) supermarket shelves stacked with sugared cola drinks

Enemies of sugar

Many policy-makers and opinion-formers are now convinced that sugar is a major cause of obesity, diabetes, and other conditions and diseases, and often also that sugar is addictive and even toxic. Thus Amsterdam public health chief Paul van der Velpen said recently: 'Sugar is the most dangerous drug of this time' (12).

Extensive print and broadcast coverage, and emphatic anti-sugar presence on many internet websites and blogs, show that sugar is persistently and commonly believed to amount to a major public health crisis. In the US, researchers from the Harvard School of Public Health implicate sugar in obesity and also metabolic disorders (13). The American Heart Association has concluded that current recommendations for consumption of added sugars should be halved to about 5 per cent of total dietary energy (14). Vehement influential antagonists of sugar in the US include Gary Taubes, Robert Lustig and Michael Moss (15-20). In the UK, antagonists include Aseem Malhotra and Simon Capewell of Action on Sugar (4, 21, and see below). They are all making waves, and now may be riding the wave.

Box 1

What 'sugar' is

One source of confusion about sugar is failure to define what 'sugar' is. The term has different meanings. Thus, the sugar industry has for many years maintained that 'sugar' means sucrose, which is only one type of sugar. Also, many unprocessed or minimally processed foods such as fruits and some vegetables contain sucrose, and fruits also contain fructose, another type of sugar. Breastmilk contains lactose or milk sugar, which is also a component of the milk of cows and other animals.

Chemically identical substances can have different biochemical and metabolic effects when consumed, depending on their form. In this issue of *Update*, and in other contributions to *WN*, the term 'sugar' does not refer to sugars that naturally occur in whole foods, unless stated otherwise. It refers to what are sometimes termed 'free' or 'added' sugars. To be more precise, this means all sugars and syrups, from cane, beet, corn and other sources, that are added in the manufacture of food products, and in particular in the formulation of ultra-processed food and drink products. In this respect, the issue is not just sugar itself, it is the processed products that contain sugar in a form that has the most powerful impact.

The consensus position



Kiosks piled high with sugared ultra-processed food and drink products in Merseyside, England (left) and in Mexico City (right). Many health professionals now believe the evidence of their eyes

For half a century, the mainstream scientific consensus position has been that in industrialised countries consumption of sugar is too high and should be reduced. No expert report has ever recommended an increase in sugar consumption. A total of 17 reports published between 1961 and 1991 recommended for sugar, up to 10 per cent, or less than 10 per cent, or 0-10 per cent, of total dietary energy, compared with an average in industrialised countries usually estimated at around 14-18 per cent (22). Figures for young people are generally higher.

The figure of 0-10 per cent, or of less than 10 per cent, has been maintained in two World Health Organization reports, published in 1990 and most recently in 2003 (23, 24). This goal for policy-makers and guide for consumers has been and still is furiously opposed by the sugar and associated industries and organisations, and by the governments of the US and also of other sugar-producing countries (25). US official guidelines avoid setting targets for sugar. Thus the US guidelines most recently published in 2010 (26) specify percentages for consumption of saturated fat, dietary cholesterol, and salt, and maximum amounts for alcoholic drinks, but while advising to 'reduce' or 'cut back' on sugars, do not specify any number or range.

Quantification of dietary recommendations enables planning of food supplies. It is a public health measure. Relative to actual levels of consumption, numbers indicate how much the supply or consumption of diets should vary, to promote health and protect against disease. Numbers need to be consistent with findings of clinical and epidemiological investigations and with other evidence, and that said, are judgements.

The 0-10 per cent range for sugar is justified in three ways. One is that sugar is the dietary cause of dental caries, with no known threshold below which caries does not occur. Two is that sugar supplies dietary energy but otherwise no nutrients and, in the words of a classic UK report: 'sugar is an unnecessary source of energy in a community with such a widespread problem of overweight'. Three is that the less sugar in any diet, the more nutrients. To quote the same report: 'A halving of the average sugar consumption per head of the population would increase the nutrient-energy density of the diet' (27).

The indictment of sugar



Indictments of sugar are now increasingly radical. Cover of New York Times Magazine) left). Cover of US political journal (centre). Cover of Brazilian equivalent of Time magazine (right)

Representatives of the sugar industry point out that some recent reports do not specify limits for sugar consumption. They denounce the 10 per cent figure, and any proposed limitation of sugar. Sugar Nutrition UK, an industry front organisation, claims (28): 'Expert scientific committees have noted that the balance of available evidence does not implicate sugar in any of the "lifestyle diseases": obesity, diabetes, coronary heart disease, or cancer at any site'.

A battle being fought now is on the consensus position summarised above. Need for its protection is one reason why Action on Sugar has been created. The WHO Nutrition Guidance Expert Advisory Group (NUGAG) is now finalising its report on sugar. WHO officials are being pressed by those who reject any limits on sugar, and also by those who believe the 10 per cent figure is too high. As with tobacco half a century ago, what is now the 'sugar war' involves two opposing alliances.

Defenders of sugar are against any regulation or limitation of sugar. The alliance is led by 'Big Sugar'. This is the sugar producing and refining industry, together with the transnational corporations that manufacture breakfast cereals, soft drinks, snacks, cakes, biscuits, chocolate and confectionery, and their front and associated organisations. It includes governments of sugar-producing countries. Supporters include those in government who are ideologically opposed to regulation, and also scientists employed or funded by industry, or who believe that the principal message on diet and health needs to remain that on fats, saturated fats, and *trans*-fats,

Attackers of sugar support restriction and regulation of sugar. This alliance has no massive vested support. It is led by a growing number of leading clinicians and epidemiologists (1-4, 13-14, 29-33) who work within the established system, but who see that the game has changed, because of the increase in consumption of sugar, notably in soft drinks, because of rocketing rates of obesity and diabetes, and because of accumulation of new evidence on the properties of sugar. It is supported probably by most relevant qualified professionals who have no links with the sugar industry or associated bodies and who uphold the current consensus



One of the main charges against sugar is that it is not merely delicious and habit forming, but is addictive in the same sense that alcoholic drinks and cigarettes, and even hard drugs, are addictive

Some people go further and see sugar as the master cause of the multi-organ metabolic syndrome, and may also be convinced that it is addictive. Some are formally qualified in relevant biological sciences. They are critical of the general consensus on food, nutrition and health (23,24), as being obsolete, narrow, irrelevant or mistaken (15-21). Their position includes the following indictments, some of which are outside the frame of reference of current conventional nutrition science.

- Sugar especially in the form of sugared food and drink products, is now, or always has been, a more important cause of obesity, diabetes, and cardiovascular disease, than any other dietary component.
- Sugar as contained most of all in sugared soft drinks deranges, damages and eventually may destroy the mechanisms that control appetite, and so is liable to cause obesity irreversible except by surgery.
- Sugar is the 'master' cause of metabolic syndrome, the multi-organ 'master' disease whose manifestations as well as those above include diseases of the liver and other vital organs including the brain.
- Sugar is addictive. Processed products high in sugar induce craving, and are often formulated to do so. Their impact on the nervous system is as intense and damaging as that of alcohol, cigarettes, or hard drugs.
- Sugar, as the most profitable cash crop after tobacco, depletes soil, causes erosion and aridity, drains water sources, exploits workers, creates dependency, and displaces sustainable food systems

Of these the most explosive issue is the identification of sugar as addictive (34-36). If this became accepted by regulatory authorities, or upheld in legal proceedings, the sugar industry would be in deep trouble. Evidence on addiction is disputed. Few nutrition scientists have competence in neurological biochemistry. Those that do, may work for or be funded by manufacturers of food products formulated to be habit-forming. One independent authority is Nora Volkow, since 2003 director of the US National Institute on Drug Abuse. Her conclusion on processed and sugared food products is: 'The data are so overwhelming the field has to accept it…We are finding tremendous overlap between drugs in the brain and food in the brain' (37). Given published and attested testimony that industry executives always knew that some of their products were in effect addictive (19), this is a ticking time-bomb.

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Sugar

What sugar does to you: Action on Sugar

Access January 2014 Update on advocacy concerning sugar here



Action on Sugar founders (top, row): Graham MacGregor (chair), Katharine Jenner (campaigns director), Aseem Malhotra (science director),); Aubrey Sheiham, Philip James, Mike Rayner. (Next): Tim Lang, Andrew Rugg-Gunn, Nicholas Wald, Jack Cusick, John Wass, Peter Sever. (Then): David Haslam, Tam Fry, Neville Rigby; Robert Lustig, Yoni Freedhoff, Simon Capewell

The Update team writes:

The UK pressure group Action on Sugar (AoS), launched on 9 January (1), has been formed in interesting times. It is an offshoot from Consensus Action on Salt and Health (CASH), developed into World Action on Salt and Health (WASH).

The Action on Sugar executives

Chairman of all three organisations is Graham MacGregor (top left). A distinguished specialist in cerebrovascular disease, he has an established reputation for leading the campaign to reduce salt consumption in the UK. He is a progressive. He believes that it will be possible to repeat this success, by collaborating with the UK government and branches of transnational and other industries based in the UK, in order gradually to reduce the amount of sugar in processed products. He is supported by AoS campaigns director Katharine Jenner. The science director of AoS, London cardiologist Aseem Malhotra, has more radical views.

The Action on Sugar advisors



Production and consumption of sugared breakfast cereals and other sugary ultra processed products, and also of sugared soft drinks, have rocketed since the 1980s. So have rates of obesity and diabetes

Founders of AoS also include the 13 all-male medical and other expert advisors from the UK, shown above. In the top row and the middle row (left) are four veterans of campaigns for healthy food since the 1980s. These are Aubrey Sheiham of University College, London; Philip James, now president of the International Association for the Study of Obesity, and chair of the panel responsible for the 1990 WHO report whose findings include a 0-10 per cent recommendation for sugar; Mike Rayner of the British Heart Foundation unit at Oxford University; and Tim Lang of City University, London. Others in the middle row are distinguished medical men not known as inveterate activists. These are Andrew Rugg-Gunn of Newcastle University; Nicholas Wald and Jack Cusick of the London School of Medicine; John Wass of Oxford University; and Peter Sever of Imperial College, London.

Support for AoS is also coming from medical representative organisations. The message from the Royal College of Physicians of London is: 'We welcome this concerted and collaborative action to tackle the damage to health caused by consuming too much sugar. It is widely acknowledged that sugar is a major factor in both obesity and diabetes... We strongly support Action on Sugar's campaign for clearer nutritional labelling of food and drink, and welcome its call for evidence-based government action to improve the public's health by reducing the amount of sugar added to food and drink by manufacturers'.

The bottom row above includes from left, three campaigners: Andrew Haslam and Tam Fry of the UK National Obesity Forum, and Neville Rigby, formerly of the International Obesity Task Force. Next are the two non-UK AoS advisors, both radicals, Robert Lustig from the US and Yoni Freedhoff from Canada. AoS advisors include nobody from outside the UK and North America

Finally, Simon Capewell of Liverpool University is the AoS firebrand. The line 'sugar is the new tobacco' is attributed to him. He also says: 'Sugary drinks and junk foods are now pressed on unsuspecting parents and children by a cynical industry focussed on profit not health. The obesity epidemic is already generating a huge burden of disease and death. Obesity and diabetes already costs the UK over £5 billion every year. Without regulation, these costs will exceed £50 billion by 2050'..

The Action on Sugar manifesto



Cola and soft drinks and sweet processed products obviously contain a lot of sugar – more than we may think. Plus a vast number of ultra-processed products making health claims are very sugary

Aseem Malhotra of Action on Sugar writes:

A group of UK and international experts, including myself, have launched Action on Sugar. The main aim is to pressure the food industry to reduce added sugar in foods by 40 per cent over four years which, other things being equal, would mean 100 fewer calories per person per day.

The evidence that added sugar should be targeted is now overwhelming. Unlike fat and protein, refined sugars have no nutritional value. Contrary to what manufacturers of processed products want you to believe, the body does not need any carbohydrate from added sugar for energy. Sugar is added to the majority of processed food products in the UK. Yet many consumers are unaware of its presence in such large quantities. In the UK and Europe guideline daily amounts for sugar have not been updated since 2003. These suggest one can consume a staggering 22 teaspoons of sugar daily. The misleading labelling and health claims on products that have shocking levels of sugar added is a scandal.

It took 50 years from when the first scientific studies between smoking and lung cancer were made before any effective legislation was introduced through regulation. This was because Big Tobacco very successfully adopted a corporate strategy of denial. Techniques included planting doubt, confusing the public, bribing political allies and even buying the loyalty of rogue scientists.

The comparisons with the sugar industry are quite chilling. The food manufacturers spend billions in junk food and sugary drink advertising, targeting the most vulnerable members of society, including children. Worse, the industry cynically associates fitness and sport with junk food and sugary drinks. Thus Mars is one of the official sponsors of the England football team. Yet one regular sized bar contains eight teaspoons of sugar, almost triple the amount recommended as a limit for a 4- to 8-year-old child. The commonest cause of chronic pain in children is tooth decay with sugar as the number one risk factor. Regular physical activity has a multitude of health benefits; however, its effect on sustained weight loss is often weak. Furthermore, activity levels have changed little in the past 30 years as obesity has rocketed.

We are all vulnerable. You don't have to be overweight to be affected by diet-related disease. Of all the chronic diseases, type 2 diabetes is perhaps the most damaging. It can lead to heart attacks, stroke, kidney failure, eye disease and leg amputations. The direct and indirect costs to the UK of diabetes is over £24 billion (roughly $US 36 billion) and projected to approach £40bn (or $US 60 billion) by 2030. If we do nothing, this will cripple the UK National Health Service.

A teaspoon of sugar or one cigarette will not harm you. But over time, the habit can be fatal. Unlike Big Tobacco, Big Sugar deliberately targets children. And added sugar has become so pervasive that we can't avoid it even if we wanted to. But perhaps most disturbing is the financial and political muscle that the tobacco and food product industries have exerted to protect their profits at the expense of our health. It's time for Action on Sugar.

Excerpted and edited from The Guardian, 11 January 2014 (2)

Box 1

Voices of the people

Editor's note. The feature above by Aseem Malhotra, together with two others in The Guardian and The Observer at the launch of Action on Sugar, attracted over 1,500 comments. Below are extracts from some reactions. Significant comments were roughly one-third supportive, one-third neutral and one-third hostile. Here are 12 themes.

Theme 1. This is karma
Tlargey. Sugar is the revenge of the slaves. Slaves planted and harvested sugar cane on plantations owned by rich English, other Europeans and their colonies, and later US states. It is cosmic justice that sugar should be proving lethal to the heirs of the slavers

Theme 2. Let's live a little
Colinius. We drink alcohol, we consume sugar and salt. Some of us smoke. Many of us eat fatty foods and consume cholesterol, we climb mountains, we do hang-gliding, we fly in planes. We live dangerous lives. I accept it. What I don't accept is all this Nanny State crap.

Theme 3. Down with the food fascists
Grubbedout. I suppose the health fascists have to find something new to hang their careers on. They are smug members of the middle classes, patronising the great unwashed.

Theme 4. It never hurt my parents
Wellesz. Sugar in the right quantity is good for you. Nor is it addictive – people are weak willed, or just lazy. Strawberries with whipped cream and icing sugar – delicious. My parents always had sugar in tea, loved apple tart and pastry. They lived diabetes-free to 95 and 101. Gloomsters and doomsters are having a nice little earner, plus international conferences.

Type 5. Experts? Forget them
Smellthecoffee2. The biggest killer in Western society is stress, much caused by doctors and other do-gooders telling us what we can or cannot do, what is good and what is bad and, worst of all, changing their minds every so often. One day orange juice is good for you, the next day it's got too much sugar in it. Give it a rest and let us enjoy life before we die.

Theme 6. What about the workers?
Passthebutterplease. The government knows only too well that if they decided to implement stricter regulations on the use of sugar in food there would be jobs at stake. Take Cadbury's for example. If they were instructed to reduce the amount of sugar in their products, people wouldn't like the taste, sales would drop and jobs would have to go.

Theme 7. It's all too much
Jeff Harpell. I find it hard to believe that extreme swings in eating habits are healthy. Diet and health on the one hand seem so straightforward and yet part of an amazingly complex world of interrelated causes and effects including culture, work, and even family history.

Theme 8. It's worse than you think
Ilovejessepinkman. As someone with seven years' recovery in AA from alcoholism and four years' recovery from bulimia, I know what sugar can do. I relapsed on sugar for a month before Xmas and am nearly three weeks off it but the withdrawal was horrendous for nearly two weeks. Headaches, nausea, aching body, anxiety. Sugar is toxic stuff in my opinion.

Theme 9. Don't knock carbs
CaliforniaNorth. We need carbohydrates in our diet for survival. Agriculture yields carbohydrates and meat protein. Everything else is just extra. There is something weird going on in the war against carbohydrates. I had a neighbour suffering from diabetes. He lost both of his legs below the knee. I once saw him in his wheelchair sucking on a popsicle. He said his doctor did not say anything about avoiding sugar, just avoiding carbohydrates.

Theme 10. We don't need to be healthy
Sunnafternoon. Health cannot improve indefinitely. Plus what's the point:

1. Many awful diseases and illnesses are on the rise simply as a result of people living longer.
2. Care for these diseases costs an unbelievably large amount of money.
3. When we have cured the current diseases new ones or existing rare ones will take over.
4. People may get older but their health will decline and they will have a low quality of life.
5. If people work in offices and their only activity is sex, there is less need to be healthy.

Type 11. Tax the bastards
CharredCard. Best way to train corporations is to impose tax cuts for healthy foods, tax hikes for unhealthy food. An independent agency should ban the worst foods, put less healthy foods in high tax category, put most healthy foods into low or no tax categories. The scumbucket corporations will get most brands banned or put into high tax categories.

Theme 12. Mother knew best
Sewinghabibib. I'm a child of the late 70s. There was always some processed stuff like sauces in the house, but no ready meals. The only processed thing we ate regularly was sausages from the local butcher. Our Sunday night treat was ice cream in summer or pie to heat up in winter served with cream. I was raised on meat and three veg (winter) or salad (summer) with chips (deep fried - not oven baked) served with every meal. Mum bought two 1.5 litre bottles of sugared Coke a week and one family-sized block of chocolate to be shared between the 6 of us, dished out sparingly. We ate a lot of bread from a baker's, which didn't keep like today's stuff. So by today's standards we ate far too much salt, meat and fat but we were all lean and healthy. I veered from this in my 20s and early 30s as adult work life took over. Convenience foods became my go to and the weight piled on. Then I went back to the kind of food I was raised on and the weight fell off. I'll take my old fashioned diet any day over the 'low fat' rubbish that's laced with sugar.

Will Action on Sugar work?

Hooray for Action on Sugar! Hooray for its title and topic. Hooray for its bite and verve. Graham MacGregor has bags of style and drive. The sense of coalition between reasonable negotiation and vehement denunciation, united to tell it like it is about sugar, the sugar industry, and the impact of sugar on health, is exhilarating.

History tells that public health is protected and improved when activists and academics work together, and with professionals and politicians. Such combinations enabled construction of sewage systems and creation of primary health care services in an earlier period of industrialisation. So far, Action on Sugar is on the right lines.

In the 1980s, another hard time in the UK, public health and nutrition were protected by support from eminences such as Douglas Black, Richard Doll, and Francis Avery-Jones, and by the commitment of younger medical men including Kenneth Heaton, John Cummings, and Philip James, who socked it to television viewers. They were supported by nutritionists such as Maggie Sanderson and Caroline Walker, food writers such as Derek Cooper and Colin Spencer, and civil society organisers such as Tim Lang and Jeanette Longfield.

In the US this kind of alliance is now amplified by the space and scope given in *The New York Times* to brilliant iconoclastic journalists who are also authors, such as Michael Pollan, Michael Moss, Gary Taubes, Mark Bittman and Melanie Warner. Whether anything like this can be created and sustained in the UK remains to be seen. Felicity Lawrence and Sarah Boseley of *The Guardian* are a start.

Action on Sugar is a UK group. Following Graham MacGregor's persuasive powers on reduction of salt in the UK food supply, its first aim is to achieve something similar with sugar. Diplomatic skills may lure a government in league with transnational corporations and aware that nutrition is not a 2015 election-changer, to nudge some cuts in sugar from ultra-processed products manufactured in the UK. But it would take some rather bold regression analysis to claim that the result had saved a lot of lives. Besides, as cynics have already said, suppose manufacturers do remove some sugar from their products. What takes its place? Nevertheless, hooray!

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Big Food Watch network member

Fabio Gomes. Convenor



Editor's note

From this issue of *WN* onwards we will profile a member of the *Big Food Watch* network, with one example why they are committed as a member of the network. We start with *BFW* convenor Fabio Gomes. He is a Brazilian nutritionist, external relations secretary of the World Public Health Nutrition Association, and a *WN* assistant editor. He was an originator and one of the masterminds of the *World Nutrition Rio 2012* congress.

I come from the South, from the tropics. In my vast country of Brazil, our singers, poets, painters and musicians, celebrate food and drink, meals, and the pleasure of eating and drinking in company with family, friends or colleagues. The people in my own social and professional life have European, Asian, African and indigenous origins. The traditional food systems of Brazil are not so celebrated as those of China, India, Mexico or Peru, but all the same, we have an immeasurable natural and cultivated treasure of foods and dishes that come from authentic sources, evolved and adapted by climate and terrain, farmers and other workers, and by experience learned over many generations of what is most delicious and vital for well-being.

The traditional Brazilian diet is not perfect. For example, it reflects the fact that sugar is a cheap commodity as well as being a cash crop that supports the national economy, and it has inherited the Portuguese taste for salt. But when communities and populations are sure of enough to eat, dietary patterns based on a variety of freshly prepared dishes and meals are rarely deficient, and are not a significant cause of obesity or chronic diseases like diabetes, heart disease and various cancers.

However, nutrition in the current conventional sense is not the only driving force for *Big Food Watch*. As a public health nutritionist, I know that goof food and nutrition prevent disease and disability and protect public health. But for us in Brazil and many other regions and countries in the South, public health nutrition is a very big picture. Food and nutrition affects human biology and behaviour, for sure. As well as this, it has mental, emotional and spiritual aspects, social, economic, political and environmental dimensions, and evolutionary, ethical and historic foundations. These are all reasons to watch Big Food, whose activities affect our lives in many ways.

Big Food Watch
The privatisation of life



Brazilian flora (cupuaçú) and fauna (pit viper and kambô frog): examples of natural life whose properties may become privatised, patented and thus in effect owned by foreign and other industries

Since the 1980s, national governments have rapidly privatised public utilities and goods, and so enabled transnational corporations to cash in. In Latin America this process began mostly in the 1990s. The biggest corporations now have turnovers that match the gross national products of middle-size countries. Their most ambitious strategy now is to privatise nature – life itself.

Patents on human genes

US corporations have been taking out patents on human genes for decades. Since the 1970s, 3,000–5,000 patents have been granted (1). Anybody wanting to make use of a patented gene must pay the patent-holder. In June last year, the US Supreme Court agreed that human genes cannot be patented. Its ruling stated that merely separating a gene from its surrounding genetic material is not an act of invention (2). But there was a sting. The Court distinguished between 'natural genomic sequences', and 'cDNA, or complementary DNA': these nature-identical copies the Court agreed can be patented. An expert explains: 'That's what gave the biotech industry more of a shot in the arm, because most of the commercial products tend to hinge on these synthetic concepts' (3). 'Raw' DNA is not where the action is. The profit is in copies.

Flora and fauna can be patented

But there is as yet no ruling on non-human 'naturally occurring' components. These still can be patented. Here are three examples from my own country of Brazil.

Cupuaçú (picture above, left) is a native Amazonian fruit. In 1999 the Japanese multinational Asahi Foods applied to patent cupuaçú seed oil extraction and use, got permissions for applications in the US and EU as well as Japan, and created a subsidiary, Cupuacu International. Happily, the uproar from Brazilian civil society organisations was organised and intense, and the applications have been withdrawn.

Biopiracy is another strategy used to exploit natural resources for commercial purposes. The venom of the Brazilian pit viper *Bothrops jararaca* (picture above,

centre), was taken to the UK, and manufactured as from the 1980s as Captopril by the Big Pharma corporation which is now Bristol-Myers Squibb. The properties of the venom were already known to native Brazilians, who used it on arrow-tips. Its use for treatment of hypertension would be apparent to any enterprising visiting pharmacologist. Bruno Barbosa, head of the Brazilian federal environmental oversight agency Ibama, says there are abundant examples of biopiracy like this (4).

Another example is the kambo or kampu, *Phyllomedusa bicolora,* (above, right), a leaf frog common in Amazonian forests. Indigenous people extract its secretions for medicinal and magical purposes (5), which visiting naturalists and pharmacologists also realised could be developed as drugs. There are now at least ten applications worldwide to patent use of the active substance, whose properties were discovered and used by native communities for centuries (6).

Outsiders continue to exploit indigenous and other traditional people who have identified and developed skills to use the treasures of nature, and penalise them for not knowing how to patent the products of their own long-earned skills and wisdom.

Privatising public goods



Peter Brabeck-Letmathe, president of Nestle, now also chairman of the Formula I board (left with founder Bernie Ecclestone) raised a storm in Canada when he received a degree for services to water

Water is a common good, like air and earth. Privatisation of water may be the biggest commercial prize of all. Enter Nestlé. Its president and former chief executive officer Peter Brabeck-Letmathe is seen above. At left he is in his new role as chairman of another lucrative global enterprise, Formula 1. At right he is receiving an honorary degree from the University of Alberta, Canada, in early 2012. He was honoured 'for his exceptional position within the global corporate sector to engage government and business leaders on the critical issues of water resource scarcity and security'. Many faculty members were outraged, saying that one colossal barrier to free access to safe water is Nestlé: hence the film *Bottled Life*, screened at the same time (7).

The story of Nestle and water became a scandal in 2005 with the release of an earlier film, *We Feed the World* (8). In it Peter Brabeck-Letmathe said: 'Water is of course the most important raw material we have today in the world. It's a question whether we should privatise the normal water supply... The one opinion... is represented by the

non-government organisations who bang on about declaring water a public right... That's an extreme solution. And the other view says that water is a foodstuff like any other, and...should have a market value. Personally I believe it's better to give a foodstuff a value, so that we're all aware that it has its price, and then that one should take specific measures for the part of the population that has no access to this water.'

Since then he has been clarifying this statement. He now says 'the groundwater of Henniez, Vittel or the Indus basin is not "private". What can be privatised however is the use of water or the delivery of water to the user by pipe systems or in bottles.' This of course comes to much the same thing.

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How to respond

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