2012 April column
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This is the month of *Rio2012*, the conference created by our Association in partnership with the Brazilian national public health civil society organisation Abrasco. The presiding genius of the conference is Inês Rugani. Among many other achievements she, with her teams in Rio, has ensured that all income and material support is coming only from registration fees, and from public sources such as Brazilian national and state agencies and organisations. So first, I have something to say about the need to keep public health nutrition independent of conflicted interests. Then once again I wonder why the food so often used as a symbol of good health is the apple. Then I tell a tale of caramel and of the Bovril Two of whom I was one.

My hero: Colin Tudge
Complete understanding

'Forgive me' said Colin Tudge, this month's hero, pictured above, when I first met him in June 1983, in a south London pub of his choosing, 'but I can't be as excited as you obviously are. I feel I have done my bit'. Words to that effect. My date with him was to discuss the politics of food in the UK. He then was features editor of *New Scientist*. Then I was a newspaper journalist, and had discovered that an officially commissioned national report on food and health had been suppressed by the Department of Health and Social Security (also known as the Department of Stealth and Total Obscurity).

Its main message was that then typical British diet was a major cause of obesity and deadly diseases. (As it still is). The relevant national government functionaries, and their colleagues in the food manufacturing industry, didn't like this. Nor, or so it was rumoured (correctly, it turned out) did the then Prime Minister Margaret Thatcher. This was hot stuff, and *New Scientist* did indeed follow up my story. But why Colin's response to my revelation? Later I found out. His book *The Famine Business*, published in 1977 (1), had exposed the kind of hanky-panky I was roused about – but on a

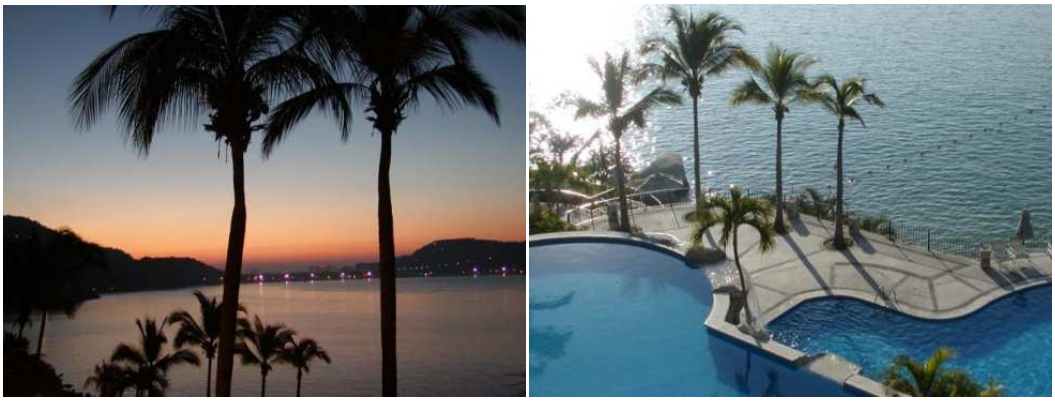
world scale, following the UN Rome World Food Conference in 1974. Furthermore, all I saw was a national problem. Colin had solutions to the world food crisis. He still has, and they are the same answers, encapsulated in his term 'rational agriculture'.

Reference

1 Tudge C. *The Famine Business*. London: Faber and Faber, 1977.

Conferences. Industry involvement. Conflicts of interest

Keeping honest



Acapulco 2003. Latin American nutrition conference. Views from my hotel bedroom: sunset and the swimming pools and the bay beyond in the morning.

As mentioned above, the Association's *Rio2012* conference this month has no support of any kind from industry. In the field of nutrition this, as far as the committees responsible for the conference know, has never been attempted before. Important? Yes, I think so, and to explain why, I begin with a story.

What is reality?

Luis Meija, previously with Kellogg's, then with Archer Daniel Midland (ADM), the plant oil and syrup conglomerate, was displeased with me. 'There is no point in being antagonistic' he said. 'You need to collaborate. Industry is going to do what it does, no matter what you say . . . Look around you!' He gestured towards the stands of the sponsors. 'You wouldn't be here without the support of industry. That's reality'.

He and I were at the 14th triennial conference of the federation of Latin American nutrition societies (SLAN), in Acapulco, Mexico, in 2003. Yes, I had already looked around. There indeed, conspicuous by their presence, were the stands of the event's main sponsors Nestlé, Unilever, Danone and Kellogg's, then the world's #1, #2, #5

and #9 food processors, with a 2002 combined annual turnover of $US 120 billion. Coca-Cola, US Meat, Cadbury, ADM, and the Mexican corporation Bimbo were there in force too. The Kellogg's stand featured Froot Loops™ with Toucan Sam™ which looked like confectionery to me, but whose pack displayed a symbol of commendation by the Mexican Pediatric Association (1).

It wasn't hard to find a Coke™: there were vending machines in the conference hall. It is a bit misleading though, to mention that eatable or drinkable products are for sale at a conference. Usually anybody attending can graze free snacks and drinks all day, and get free packs of breakfast and lunch too, if prepared to sit through special sessions. These are listed in the programme, although funded and controlled by their industrial sponsors, and the talks may be given by nutrition scientists who are consultants to the sponsor. Are these conferences really meetings in the public interest, or are they trade fairs? It's hard to say. Nowadays, young people queue at the sumptuous stalls organised by transnational ultra-processed product manufacturers, to be given a goodie, maybe a branded memory stick already loaded with propaganda, to fill in job applications, and to have their email address captured.

The conversation with Luis Meija came about because, during the conference, I had stood up and asked a speaker from the International Life Sciences Institute, after her presentation on promotion of healthy lifestyles, how many members of the ILSI executive (not advisory) board were executives of soft drinks corporations. Also, I had asked what percentage of ILSI core (note, core, not general or programme) funding came from transnational food and drink product companies (2). (There's an account of this in my February 2004 'Out of the Box' column written for *Public Health Nutrition*). My questions were not answered. As I spoke I saw somebody giving me the hard eye, and after the session I introduced myself. This was Lluis Meija, and yes, he felt that my questions were not appropriate, and he said what he said.

Back at the splendid hotel I was staying at, I brooded, as the sun set (above, left). The next morning (top, right) I got up early and went for a swim with Ricardo Uauy. We sat on the raft in the bay and talked about infant and young child nutrition. Luis Meija is right, I thought to myself. Ricardo and I are here courtesy in effect of Froot Loops™, not to mention all the oils and syrups formulated by ADM that give thousands of processed products their caloric wallop. Get real, wise up, that's life, I thought, gloomily.

Six years later, the 18th SLAN conference was in Santiago, Chile. This was also very nice. Commercial sponsors of that meeting included ADM, Coca-Cola (whose sign, of its Beverage Institute of Health and Well-Being, is below, right), Danisco, Danone, ILSI, Kellogg's, Naturex, Nestlé, PepsiCo, Unilever, and a number of Latin American or specifically Chilean firms. How much of the income of the conference did they contribute? No idea. Nutrition conferences do not publish accounts.



Santiago 2009. Here is fhe 'flag of Cokeistan' and the Coke lovelies, strutting their curves and exposing their bellies for the delight of susceptible delegates

A lot of progress had been made by sponsors between 2003 and 2009. The Coke people organised two of the lunchtime satellite symposia, both with free lunches, both given full-page advertisements in the programme. One was on hydration, health and well-being, the other was on exercise as medicine. The elegant Beverage Institute insignia, which was everywhere, I see as the flag of Cokeistan. The soccer World Cup… the Olympics… could a cash-strapped country or state change its name to that of its sponsor? Why not? Countries and states are named after people – Bolivia, Colombia, Rhodesia as was; and Victoria, Alberta, Queensland, Washington, Virginia, Louisiana, Pennsylvania, Tasmania… Why not corporations? Remember you read this here first. What was new since Acapulco, was the hiring of lovelies (above, left) to advertise Coke. Maybe some were nutrition students.



Santiago 2009. Coke™ guided us from science to commerce. Right, Fabio Gomes and Enrique Jacoby of PAHO are amazed by the red plastic carpet

They were not only in the very prominent airy exhibitors' hall upstairs. They roamed in the corridors and smiled at us all. Some went downstairs to the corridor outside the rather dark and musty rooms where the scientific presentations were made.

On the last day the stairs from the commerce to the science were painted with signs for the exercise symposium, as you see above. This was amazing even for scarred veterans like Enrique Jacoby of PAHO (right above) as well as to young idealists like Fabio Gomes of the Brazilian National Cancer Institute (INCA) (left above).

The issues here emphatically are not just about nutrition conferences held in Latin America. Not at all. My archive includes many pictures from world conferences organised in association with the International Union of Nutritional Sciences. Nor emphatically am I suggesting that they are mostly about Coca-Cola, who made a big push in Santiago. Not at all. As listed above, a substantial number of the leading transnational, continental and national corporations were there.

Nestlé promoted their instant coffee with a rather steamy 'pour your boiling water into my container of powder and I'm all yours' advertisement (below, left). PepsiCo, outgunned by Coke in Chile, also hired some lovelies (below, right) to woman their stall and that of the PepsiCo Foundation. This, and the foundations created by Coca-Cola and Nestlé, are designed to position the corporations as committed to health and well-being, and also – somewhat audaciously, in my view – prevention and control both of obesity and of starvation in Africa.





Santiago 2009. Relentless attractive promotion for ultra-processed instant coffee and cola health and well-being. No mention of baby formula or sugar

Ever since I attended and participated in my first nutrition conference close to 30 years ago, I have wondered what I feel about all this. Now that I live and work in the South, it has all become clear. All giant manufacturers and purveyors of ultra-

processed products are competitive only in a surface sense. They all have the same general strategy, which has the effect of displacing traditional food systems and replacing them by systems that they control on behalf of their financiers and shareholders. They are combined in a common interest, which is to teach the world to snack from infancy to death. This means the decline and eventually the end of cooking, the meal, the family table, and in some ways the family itself.

Nutrition is valuable to the big corporations, who know that they can influence many if not most institutions, departments, projects and people in our field of interest to them. And conferences, what are they really for? 'Attendees' jet in, exhibit or present, step up a rung of their career ladders, maybe prepare to move out of academia into the UN system or government or industry, plan research projects, meet colleagues and friends, enjoy the fancy hotel accommodation, cocktails, the gala dinner and tours of local sights, buy some artisan knick-knacks, and jet out. Very nice.

It's more than that, though. Conference organisers and programme committees are not about to do anything – not much, anyway – that will bite the hands that feed them, of the corporations with interests conflicting with public health, who provide cash and other material support. So we get programmes with themes like 'Nutrition: From Genome to Syndrome', or 'New Insights, New Frontiers', or 'Current Knowledge and Future Horizons' or 'Food and Nutrition Security for All'. Maybe professional conference organisers have bunches of these phrases, like wallpaper shops have swatches of patterns, for their customers.

The ideal becomes real

'So if you are so worked up about the way things are, why don't you organise your own conference?' People in the awkward squad have often been challenged like this. Fair enough. So two years ago, it became a prime mission of the Association to mount a world conference whose income was solely from registration fees, and from public funds. This is what has been achieved, in *Rio2012*. You no doubt read the home page of our website as well as this column, so you know all about this already. Many of you are participating in the conference – let's meet. I suppose Luis Meija won't be there, although anybody from industry has been welcome to register. If he is there I will shake his hand and say 'Thanks for the challenge'.

Notes

1 Lots of sweet breakfast cereals marketed to and for children are 40 per cent or more sugar by weight. Froot Loops™ is now also marketed in a lower sugar version.

2 Founded in 1978, ILSI is what's known as a BINGO (business interest NGO). Its 2011 annual report shows that 70 per cent of its income is from its members, which are food or drink companies, mostly making ultra-processed

products or their ingredients. This doesn't answer my question about core funding. Its board of honorary trustees is roughly half from industry, including ADM, Coca-Cola (2), Danone, General Mills, Kellogg's, Kraft, Monsanto, Nestlé (the chair), and Pepsi-Co. The rest come from government or universities, about half of which are from the Americas. The ILSI site (www.ilsi.org) does not list any executive board.

Symbols of health. Apples
Give Eve a fig





Why are apples a universal symbol of healthy food? A plausible answer is that they are always presented as snacks, they don't affect the basic nature of diets

The Christian Bible does not say that the fruit of the knowledge of good and evil, that the serpent offered. and Eve then Adam ate, in the Garden of Eden, was an apple. Assuming Eden was in Mesopotamia (today's Iraq) the climate was too hot for apples. Besides, in those days, as imagined by the reverend men who wrote the book of Genesis, any apples anywhere would have been hard, puny and sour. The fruit that the writers had in mind was more likely a luscious fig or a juicy pomegranate, which symbolically and sensually makes much more sense.

Above are two interesting pictures. On the left is a cover of *Newsweek* designed to advertise the US First Lady's healthy eating initiative. Two aspects leap out of the page. The cover line is 'feed your children well', but Michelle Obama's prominently displayed fingernails make it super-obvious that if anybody is feeding her children with home cooked meals, it sure ain't her, unless the nails are fakes which she unsticks before entering the presidential kitchen. And now look at the apple. All types of commercially successful apples, bred not to bruise and to look decorative, are as you know from knowledge of food composition tables, almost uniquely wretched among fruits for nutrient content, unless you eat the peel and also the core. But the main point, is that apples presented in this way have got nothing whatever to

do with meals. They are being presented as snacks, as a distraction from meals.

This helps to explain the picture on the right. Cute, eh? It's from an advertisement for Gerber, originally a US company, specialising in what I unkindly call kiddie-glop – expensive purées of vegetables and fruits used as weaning food for tots, formulated to be toxicologically super-safe, until you take the lid off, that is. Gerber was purchased in 2007 by Nestlé for $US 5.5 billion. The advertisement is extremely clever, to my mind. Why does it show a little girl nibbling a great big shiny apple? Why does it not show her sitting down to a home-cooked meal? Do I have to ask?

Besides, while fruits are healthy foods, there is no global best choice. Fruits should not be presented as a symbol for healthy diets, which are mainly made up from meals and dishes. Second, a variety of fruits should be displayed, and these should be native of or established throughout the country. The interpreters of Genesis have much to answer for. Prefer figs or pomegranates. Or passion fruit.

Sugar. Caramel. Cosmetic additives
Tales of the Bovril Two



Tales of the Bovril Two… Three classic Bovril advertisements. From left: fortification of British Imperial troops; papal brew; tonic for sporting woman

In this column last October I told the story of how in June 1984 my partner Caroline Walker and I become the Bovril Two. We were successfully sued by Beecham, the big drug, food, drink, hair-cream and toothpaste conglomerate. Actually it was more than that: Beecham won an injunction against our book *The Food Scandal*, meaning that it had to be withdrawn from sale immediately, until our publishers reissued it with the word 'Bovril' expunged (1).

Why, was because we had listed a whole lot of savoury foods as containing sugar, such as canned tomato soup, macaroni cheese, smoked ham, beefburgers, cheese biscuits – and the branded product Bovril™, then manufactured by Beecham. 'Crazy you might think' we wrote (the style is unmistakeably Caroline's). 'As fast as we have been studiously avoiding the stuff in our tea and coffee and trying to eat fewer over-sweetened cakes because we know they are bad for us, the food-processors have been shovelling it right back in our food before it hits the supermarket trolley... All of us are used to eating sugar in nearly all our processed foods'. The passage continues with observations about industrial ingredients like sugar being made artificially cheap by subsidy. 'With so much economic support, the price is cheap. It costs less than nutritious food. And if it's cheap, in it goes'. And there was more in this vein.

We didn't expect that the manufacturers of processed food would enjoy what we wrote. There was a lot more in the book about products that are salty, for example, and that contain lots of fats or additives, as well as sugar. The first move against us, or so we gathered afterwards, was a meeting of processed product manufacturers gathered together by their trade organisation, as a result of which specialist lawyers were briefed to comb through the book to find passages that were sufficiently defamatory to make a case against us stick.

You now need to know a bit about UK defamation law, which is biased in favour of plaintiffs. A common definition of 'defamation' is 'A publication... which is calculated to injure the reputation of another by exposing him to hatred, contempt, or ridicule' (1). If sued for defamation, also known as libel (slander is spoken defamation) in the UK the onus is on the defendant. Two choices are either to prove that the statement complained of is not defamatory (for example, by claiming that the plaintiff has no reputation to injure) (2) or more commonly, that the statement is true and in the public interest.

So how come the writs from solicitors representing Bovril? In English law defamation (which of course means de-ing fame), applies to people and also to products. Take salt. It is one thing to state that in the amounts typically consumed, salt is noxious. That's safe. To say as well, that breakfast cereals, say, or bread, are in general often very salty, is also safe. But it is quite another thing to say that InstaYum or Marvaslice (these are invented names) are salty and that lots of salt causes high blood pressure and so on. In quite an important way this is fair enough – why pick on one product and not all the others?

The fame of products

The bottom line here, is that as well as people, defamation applies to products, and in particular branded products that have built up a reputation for being wonderful stuff over the years – like Bovril, as you can imagine from classic advertisements like those above and below(3).

Bovril has an amazing history. In its original recipe, it was formulated around 1870 by John Lawson Johnston, a Scottish entrepreneur, as 'Johnston's Fluid Beef', as nourishment for Napoleon III's armies. 'Bovril' is compounded first from 'Bo' as in 'bovine'. But why 'vril'? Here is the reason. A popular science fiction novel of the time, *The Coming Race,* by Edward Bulwer-Lytton, featured the Vril-ya, master creatures from another planet, whose energy and genius came from an electro-magnetic substance called Vril. Bingo – Bo-vril. Over the decades, as indicated by the pictures above and below, Bovril gained a reputation as great British sustenance, drunk in the First World War trenches and taken in thermos flasks by fans to football matches. Also over the decades the formulation changed. The paste remained chemically identical to rendered-down extract of beef, and it smelt and tasted the same, but the ingredients became more sophisticated.

But were we mistaken in thinking that Bovril contained sugar? Here is an ingredients list from 1983. (I bought the product at the time and still have it). 'Ingredients. Hydrolysed protein; starch; salt; chicken; flavour enhancer – monosodium glutamate, ribonucleotide; glucose syrup solids; soup stock; sugar; colour – caramel E150; vegetable fat; turmeric; chicken flavouring; onion powder; herbs and spices; antioxidants – E320, E321' (4).

So how come we were being sued? There they are in the list – glucose syrup solids, and sugar. Well, the answer is that this was not Bovril paste, the stuff in the chubby bottles, but Bovril cubes. If we had listed 'Bovril cubes' in our book, we would not have been sued – not by Beecham, anyway. Indeed, if when we were preparing our defence, we had said that we meant Bovril cubes, or alternatively if Beecham were so fussed about sugar how come they put it in Bovril cubes, we might have been OK. But alas for us, we only noticed Bovril cubes after Judge Israel Finestein had found against us and granted the injunction. So it goes (or went).

A tale of caramel

What Bovril paste – the 1984 version of the classic product – did state it contained, was caramel – with the E for Europe number of E150. And caramel is a form of sugar, right? That's what we thought. Wrong. Not in the various formulations identified as E150, mostly made by a process involving ammonium. This is not the stuff we learned to make when children by heating sugar in saucepans. To quote a book that came out a couple of years later (6): 'Most forms are made with ammonia… 98% by weight of all added colouring in the UK, covering an enormous range of products: flour, bread, marmalade, tinned beans, fish cakes, very wide range of tinned and prepared meat products, hamburgers [note], meat balls … sponge cakes, malt loaf, gateaux, chocolate rolls… packet pudding mixes, stock cubes [note]… fruity sauces, pickles, relishes, beef paste [note], ginger ale, colas [note], beer, some whiskies…' and so on.

Chemically it's different from sugar. But it's got the same name as burned sugar. We discussed this with the lawyer hired to defend us. 'What about the issue of passing off?' I said. This means confusing the public by using one name for two things. I had been hitting the legal textbooks. Lawyers don't like clients doing this. Our brief shook his head. 'What's the caramel doing there anyway?' asked Caroline. 'It's to make the stuff look like beef essence, but it's obviously only got a stingy amount of beef in it'. Not admissible as evidence, we hadn't written anything about caramel.

And thank goodness that we did not. For the story that has been bubbling under for decades, is that certain types of caramel made by the ammonium process are a toxicological quagmire. Thus this last month I read a newspaper story headed 'Coke and Pepsi change recipe to avoid cancer warning' (8). A law passed in California states that any product containing any known or suspected carcinogen above specified levels, must carry a warning on their labels. And it turns out that a chemical generated in the manufacture of some types of caramel is identified in California as carcinogenic. This is so-called 'caramel IV', made by what's known as the ammonium sulphite process.

To quote the US consumer watchdog organisation the Center for Science in the Public Interest: 'In contrast to the caramel one might make at home by melting sugar in a saucepan, the artificial brown coloring in colas and some other products is made by reacting sugars with ammonia and sulfites under high pressure and temperatures. Chemical reactions result in the formation of 2-methylimidazole and 4 methylimidazole, which in government-conducted studies caused lung, liver, or thyroid cancer or leukemia in laboratory mice or rats' (9). So to avoid a warning label, Coca-Cola and PepsiCo have taken caramel IV out of their products. They also emphasise that their products have in this respect always been safe. For the record, I agree with their position. Also, California's law apparently was based on just one laboratory study. If so it is a bad law.

Let me also make it very clear indeed that I am not saying that Bovril, or any product other than cola drinks, has used or does use this type of caramel, which in the amounts present is no doubt safe anyway. Indeed, I have no idea. The only people who would know for sure, would be in the companies that make or use caramel, or else toxicologists willing and able to analyse the products. Looking back, I am very glad indeed that we did not venture any speculative remarks in our book about caramel!

Bovril goes veggie

In due course Unilever purchased Bovril, and in 2004 made it a vegetarian product, much like its great rival product Marmite™, which as a boy I preferred, on toast. The Bo was gone. Only the vril remained. More recently still, some beef – or chicken – extract was put back (10)



Tales of the Bovril Two…. Three more advertisements. From left, patriotism in a pinny; massive strength theme; Jerry Hall combining Tarzan with Jane

Notes and references

1 The next year an updated and enlarged paperback edition was published. It's available on Amazon.

2 Neill B, Rampton R. The meaning of defamatory. [Chapter 7] In: *Duncan and Neill on Defamation.* Second edition. London: Butterworths, 1983.

3 Robertson G, Nicol A. Defamation [Chapter 2] In: *Media Law.The Rights of Journalists and Broadcasters.* London: Longman, 1984.

4 A murderer, for example, would be unlikely to win a defamation case.

5 Is the advertisement associating Bovril with the Pope as both having infallible powers, for real? Apparently yes. Those were the days...

6 This was Bovril chicken stock. No Bo. I also bought and kept a packet of Bovril red meat stock, but the contents have leaked and obliterated its ingredients list. It was probably identical except for 'chicken' read ' beef', and for 'chicken flavouring' read ' beef flavouring'.

7 Lawrence F (ed). *Additives. Your Complete Survival Guide.* London: Century, 1986.

8 Associated Press. Coke and Pepsi change recipe to avoid cancer warning. *The Guardian*, 9 March 2012.

9 Center for Science in the Public Interest. CSPI says artificial caramel coloring is quite different from real caramel. Media release. Washington DC: CSPI, 16 February 2011.

10 I am not suggesting that 'vegetarian' Bovril, or Marmite, is better than Bovril with some rendered down meat or poultry in it. I just liked Marmite on toast when I was a boy.

Colin Tudge

Rational agriculture

A rational agriculture, leading to national self-reliance, is one that makes best use of the land, while meeting the nation's nutritional needs and gastronomic aspirations. 'Making best use of the land' means producing the most and the best possible human food; but it also means farming conservatively, so that the land is not steadily run down… Farm land is not simply a food factory. Farms should provide many satisfying jobs – as opposed to a few harrowing ones, which increasingly is the case today… The schism between town and country, the lack of 'feel' among society in general and its leaders in particular for the land and the people who work on it, is one of the chief impediments to agricultural progress, and a major source of nonsense talked about food policy.

Colin Tudge 1943 -
The Famine Business (1)

Of all the people I know personally, there's just one I revere, and that's Colin Tudge. Read his books (1-4), and see for yourself. The newer ones are in the shops and the older ones you can get from Amazon. He has redirected my thinking in a big way, twice. For the first occasion, see the beginning of this column. The second occasion was when he delivered the Caroline Walker Lecture at the Royal Society in late 1999, as I was moving to Brazil. He began by quoting a genius then unknown to me, the evolutionary biologist Theodosius Dobzhansky. He said: 'In biology, nothing makes sense except in the light of evolution'. A shiver passed through me. Phew, I thought, that's the most illuminating statement I have ever heard. Colin's lecture is incorporated in Part II of his book *So Shall We Reap* (3). Buy it now.

References

1 Tudge C. *The Famine Business*. London: Faber and Faber, 1977
2 Tudge C. *Future Cook*. London: Mitchell Beasley, 1980.
3 Tudge C. *So Shall We Reap*. London: Allen Lane, 2003.
4 Tudge C. *The Secret Life of Trees*. London: Allen Lane, 2006.

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