## September blog Geoffrey Cannon



Later in this column you'll know why I begin with saucy postcard-type images of an exotic dancer. You may recognise her. She is one of the most remarkable and accomplished people of the last century. One hint is what she is wearing, featured in the last main item below. But I begin with a brave new idea to prevent heart attacks, and continue with an account of the rise and rise of the *New Nutrition Science project*. Then there's a plea to include sex and bananas in our work (thus the dancer), and I end with words of warning from *Aldous Huxley*, a sage of a recent age.

## *Fast food and drugs* **Burger, shake, fries and statin, please**

A panoramic photograph of the shop fronts in high street taken every few years, starting in the early 1980s, anywhere in the world where high streets and small shops still survive, would show the disappearance of grocers, butchers and greengrocers and their displacement by fast food joints and pharmacies.

Years ago, this gave me an idea. Why stay separate? After all, US drugstore chains sell packaged long-life snacks and soft drinks together with dietary supplements and over-the-counter pharmaceuticals. The CVS outlets on Dupont Circle and elsewhere in Washington DC (and no doubt throughout the US) stock chocolate chip cookies and appetite suppressants, 2 litre plastic bottles of sugared cola drinks and metabolism boosters (1). It's only a matter of time before these items, currently displayed in different aisles, are sold side by side, or

one strapped to, packaged with or even contained in the other. Look forward to synergistic mergers of food and drug companies.

A team of cardiologists from London's Imperial College have much the same idea. They estimate that eating a hamburger every day on average increases your chance of a heart attack by 18 per cent; that a daily cheeseburger and shake increases the risk to 23 per cent; and that regular courses of statins reduce your risk by about the same amount (2). Accordingly, they propose that fast food 'restaurants' provide sachets of statins on the table along with the standard sachets of ketchup and mustard and other condiments. Evidently aware that this brainwave might cause some comment, co-author Darrel Francis of Imperial points out that people will go on consuming fast food, and that supplying statin sachets along with the salt and sugar would be the same sort of preventive measure as cigarette filters and seatbelts (3). Indeed. Nor need such schemes stop at heart disease. Customers could also collect points towards discounted stomach stapling and other forms of bariatric surgery.

The big Imperial idea has some snags. First, fast food chains are perhaps not yet quite ready to acknowledge that their products are a cause of heart attacks. Second, statins are currently available only on prescription. Third and associated, what would stop entrepreneurial customers taking off with dozens of statin sachets and setting up bucket shop pharmacies? But maybe these are only temporary glitches.

### Footnotes and references

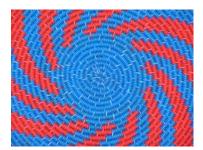


1 See how the containers for cola drinks have grown! By the way, slowly I am adapting to the joys of the internet and, as you see, occasionally make links such as <u>*Tim Berners-Lee*</u>, shown underlined in italic. These hotlinks are often more useful than references. Conventional references, which is to say citations of literature, as (2) and (3), have their place. More on them in a later column. Now though, I am making a lot more use of footnotes, as (4), meant to elaborate text and to introduce new thoughts and alternative ideas. You can choose to read the main text and scroll down when you see a number, or you can read the footnotes as a series of connected nuggets.

- 2 Ferencz E, Asaria P, Hughes A, Chatuvedi N, Francis D. Can a statin neutralise the cardiovascular risk of unhealthy dietary choices? *American Journal of Cardiology* 2010; **106,** 4: 587-592.
- 3 Campbell D. Fast food outlets could offer free drugs to offset unhealthy effects of their food. *The Guardian*, 12 August 2010.
- 4 Thus, with acknowledgements to René Magritte (below), this is not a reference.



# The New Nutrition Science project Incendiary to banal in 5 years



Successful new conceptual frameworks or general ideas, also known as 'paradigms' (1), are typically resisted and then absorbed in the following sequence:

- Ridicule this is stupid
- Aggression we must crush this
- Competition we got there first
- Assimilation so what's new

Only a few of us are OK about acknowledging that other people may at any point be ahead of us, and so the sequence usually evades:

• Acceptance – this is a better idea

So once the four sequential stages above are completed, the new (or renewed) (2) idea tends to be adopted silently, often with another name, often attributed to people other than its originators (or revivers).



<u>Max Planck</u>, who devised quantum theory, wrote: 'A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it' (3). People other than monarchs, warlords or dictators who are commemorated on currency – and here he is above, on a German two-mark coin issued in his centenary year – deserve special respect. If we substitute 'idea' for 'scientific truth', is he right? On the issue of reaction usually yes, except that adversaries may also retire, fade away or shut up, before dying, and 'a new generation' correspondingly can mean young, previously ignored or marginalised people who, seized of the new idea, become more influential and 'run with it', and maybe take over.

#### Principles, definition, purpose

So, what about the <u>New Nutrition Science project</u>, whose motif, the spiral, begins this item, in the shape of a close-up of the centre of a bowl made from telephone wire by Kwa-Zulu women in South Africa? Remember the *NNSp*? Of course you do! Here are its general principles, as included in <u>The Giessen Declaration</u> (4), its founding document:

'All sciences and all organised human activities are and should be guided by general principles. These should enable information and evidence to be translated into relevant, useful, sustainable and beneficial policies and programmes. The overall principles that should guide nutrition science are ethical in nature. All principles should also be guided by the philosophies of co-responsibility and sustainability, by the life-course and human rights approaches, and by understanding of evolution, history and ecology'.

Here is the statement on the definition and purpose of the new nutrition:

'Nutrition science is defined as the study of food systems, foods and drinks, and their nutrients and other constituents; and of their interactions within and between all relevant biological, social and environmental systems. The purpose of nutrition science is to contribute to a world in which present and future generations fulfil their human potential, live in the best of health, and develop, sustain and enjoy an increasingly diverse human, living and physical environment. Nutrition science should be the basis for food and nutrition policies. These should be designed to identify, create, conserve and protect rational, sustainable and equitable communal, national and global food systems, in order to sustain the health, well-being and integrity of humankind and also that of the living and physical worlds'.

Good stuff, we hope you agree – and as published in *Public Health Nutrition* (4), the Declaration boosted the journal's impact factor, being one of its top ten most cited papers. Every word in the *Declaration* was drafted, revised and honed several times, in Giessen in Germany. Here is one of the working groups responsible for the *Declaration*. Tim Lang (adroitly possessed of the laptop) and Mark Wahlqvist are engaged in simultaneous assertions, monitored by Claus Leitzmann and admired by Colin Tudge.

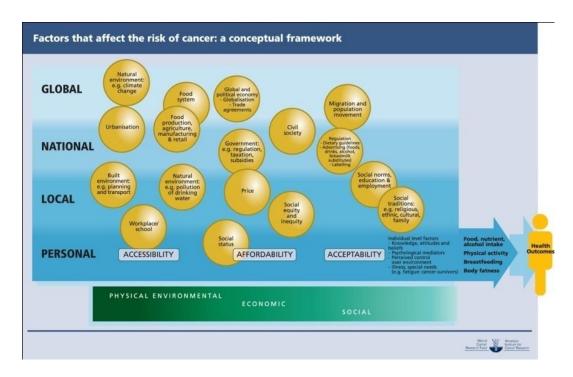


#### Seeing the big picture

Statements such as those quoted above, and others in the *Declaration*, which felt almost incendiary at the time, now five years later feel almost banal. As one example, dietary recommendations published up to around five years ago usually recommended that practically everybody should eat quite a lot more fish, without any consideration of where the fish would come from, apart perhaps from saying that fish farming is a good thing and there should be more of it. Whereas now, biological scientists and other relevant experts have been made well aware that the world's fish stocks are dwindling, that deep-sea trawling is grossly wasteful and destroys the breeding-grounds of fish, and that fish farming certainly as practiced in Asia, creates social and economic as well as environmental havoc (5).

The *NNSp* flourishes, as it seems to me (6), without need for constant explicit acknowledgement. An example is the 2009 'policy report' published by the World

Cancer Research Fund together with the American Institute for Cancer Research (7). The conceptual framework (shown below) that shaped the report's process of progressing from evidence to public policy recommendations, is much the same as that of the *NNSp*. Note the bottom green strip.



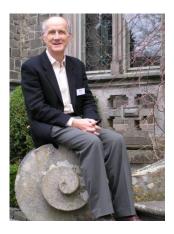
Indeed, I trust that a mission of the World Public Health Nutrition Association is first, successfully to position clinical nutrition as a sub-set of nutrition, whose main purpose obviously is to maintain and improve public health, together with that of the living and physical world and the biosphere; and correspondingly second, to position nutrition as a branch of public health. This will indeed involve the retirement and demise of a number of currently heavy-hitting medical-model clinical nutrition scientists. So it goes.

Anybody who in the mid 21st century CE is interested in recent history, will think that what are still our mainstream concepts of nutrition and public health, preoccupied with the avoidance of physical illness of currently living humans and of animals 'in the service of' humans, were narrow and strange, and one of the many inter-related reasons for the collapse of 'the new world order'. What emerges between now and 2050, when you gentle reader will be old or dead, remains to be seen. Between now and then, you might make a difference (8).

#### Footnotes and references

1 Urban Jonsson characterises 'paradigms' in our field, in his magisterial *WN* commentary. Jonsson U. The rise and fall of paradigms in world food and nutrition policy. *World Nutrition* July 2010, 1, 3: 128-158.

- 2 Many ideas believed to be new are in fact revived or developed from some earlier time. Champions of the 'new' idea may or may not be aware of this. For example, the spiral motif of the NNSp symbolises the ancient perception that progress and enlightenment is not linear, 'straight arrow', but cyclical. We return from where we came and, when progress has been made, in a higher or wider position – thus the spiral. This concept is ancient.
- 3 Planck M. *Scientific Autobiography and other papers*. Gaynor F (trs). New York, 1949.
- 4 The Giessen Declaration. *Public Health Nutrition* 2005; **8(**6A): 783-786. The name of the *Declaration* derives from its being devised at the University of Giessen, where Justus von Liebig above all others founded modern nutrition as a biochemical discipline. Here below is Tony McMichael, sitting on an *NNSp* spiral built into the entrance to an architectural extravaganza in the shape of a mediaeval Schloss owned by the university, within which the *Declaration* was framed.



The *Declaration* was finally read out by all its authors in the city centre, in von Liebig's lecture theatre, now part of a museum dedicated to his work, from the very lectern from which he delivered his pronouncements. Thus is history re-made.

- 5 Living in an economic slump as we now do, overwhelmed by evidence of the incompetence of 'our leaders', and confronted by imminent extinction and exhaustion of the natural and physical world, has its good points. One is that we are no longer inclined to assume, as conventional science and technology generally still does, that 'every day in every way, things are getting better and better'. And fish? You could try moving to a part of the world where river and ocean fish are still plentiful, and campaign against the pollution of water.
- 6 As one of the originators of the *NNSp*, I am inclined to puff its influence. But I, my colleague Claus Leitzmann, and others who worked on the *NNSp*, cannot claim to have originated the idea that nutrition is multi-dimensional, and that its biological aspect needs to be part of a social, economic – and political – and environmental 'big picture'. In modern times, *Francis Moore* <u>Lappé</u> and <u>Susan George</u> have implicit prior claim, though they did not create an explicit conceptual framework. In ancient and historic times the original

discipline of dietetics, originally and even until the 19th century the practical philosophy of the well-led life, saw the whole picture.

- World Cancer Research Fund/ American Institute for Cancer Research. Policy and Action for Cancer Prevention. Food, Nutrition, Physical Activity and the Prevention of Cancer: A Global Perspective. Washington DC: AICR, 2009. Executive summaries of this report have been published and are being promulgated in Latin America, in partnerships with the Pan-American Health Organization, and with the Brazilian National Cancer Institute. Similar initiatives for North America, with the American Public Health Association and the Canadian Partnership Against Cancer, are in progress at the time of writing. <u>Martin</u> <u>Wiseman</u> was Director on behalf of WCRF/AICR of the project culminating in the report, of which I was chief editor. See www.dietandcancerreport.org.
  - In his book *Collapse*, <u>Jared Diamond</u> has a chapter on what became known as Easter Island, and its utter deforestation by its original inhabitants to build their monuments, servicing their gods, beliefs, desires and monuments. When he tells this story in class, his students ask: 'How could they have been so dumb?' This is a good question, to ask of ourselves, for we are still on the way to destroy much of the remainder of the world's trees, and its other living and natural ecosystems, to build our monuments, and in service of our desires, beliefs and gods.

## Dimensions of scientific disciplines Make nutrition sexy

Staying with the big picture, why isn't nutrition sexy? When at the beginning of 2003 I started to write my 'Out of the Box' column for *Public Health Nutrition*, I resolved to stick some rock and roll, the term previously known as jazz, into a learned journal. Later on, thanks to <u>Colin Tudge</u> (1), the dictum 'in biology, nothing makes sense except in the light of evolution', permeated my thoughts (2). Before then though, I was alive to the instruments of evolution, known to jazzers and rock'n'rollers as 'getting down to business'.

<u>Susan Sontag</u> ended her game-changing essay 'Against interpretation' by declaring: 'In place of a hermeneutics we need an erotics of art' (3). Exactly! The loving evocation of the surface! The same needs to be said of nutrition, which somehow has become trivial, shrivelled into not much more than food examined merely as chow or prophylactic. We can gain inspiration from verse. The line 'A jug of wine, a loaf of bread, and thou' is not referring to resveratrol and resistant starch. In my second ever OOTB column in early 2003 I challenged readers to come up with a couple of songs and verses originally in English, celebrating any aspect of food. Answers came there none (4). My campaign to sensualise nutrition has been bubbling under ever since. Hooray for the columns written on this site by my friend and colleague <u>Fabio Gomes</u>

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(5). Now let our presentations and our writing simmer, bubble and boil, and shake, rattle and roll. Let us admit enjoyment into our outputs as well as our intakes.

### Footnotes and references

- 1 Tudge C. *The Secret Life of Trees. How They Live and Why They Matter.* London: Allen Lane, 2005. But it's not appropriate to cite just one reference. All that Colin writes is enlightening. Go to his website at <u>www.colintudge.com</u>. It includes an occasional blog.
- 2 As of course written by <u>*Theodosius Dobzhansky*</u> (1900-1975), the Ukranian evolutionary biologist who emigrated to the USA and who throughout his career remained a communicant of the Eastern Orthodox Church. His PhD student <u>*Francisco Ayala*</u> has been awarded the most recent Templeton Prize for work that reconciles science and religion
- 3 Sontag S. Against interpretation. Chapter 1 in the book of the same name. London: Eyre and Spottiswoode, 1967.
- 4 Cannon G. My mango, and other items. [Out of the Box]. *Public Health Nutrition* 2003; **6**(2): 129-130. Alternative reasons for silence are that nobody reads specialist journals except to check their own contributions, or else that nobody read OOTB.
- 5 Fabio tells me that he once submitted a paper on the need for everybody to eat more fruits to a Brazilian nutrition journal. This said that the antioxidant content of fruits and their glycaemic index was only one part of their story, and that their promotion needs to include acknowledgement of their cultural and sensual value.



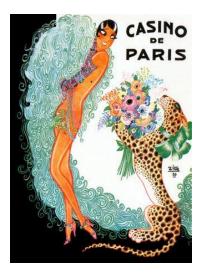
He cited the Pernambucan singer <u>Alcen Valença</u> (above), celebrating enjoyment of the taste and juice of the manga rosa (pink mango) and comparing a woman's dark eyes with the jaboticaba, and her skin with the soft fruit of the cashew. The editor tossed this section in the trash, with a comment that citations should be confined to the scientific (which is to say biochemical) literature. Pish! Fabio is now free of these bonds: click across to his column on www.whpna.org. All his columns/blogs, which began in March 2010, are available on this site.

# Food promotion Peel slowly, and see

There are not enough women featured in the Association's website, including this column, or in **World Nutrition**. That's one criticism I hear from time to time. Two more gripes are that we should show and write more about food, and also, when commenting on marketing and advertising, that we should not only bang on about its abominations.

So now is the time once and for ever, and in one hit, to disprove this charge of misery-guts misogynistic nutritionism. Here up top, introducing this month's column, is the Madonna of her day, *la petite danseuse sauvage* originally from St Louis MO, *Josephine Baker* (1906-1975), a defining icon of the inter-World War years (1).

She is posed in the altogether plus the costume of her 'banana dance', her most memorable act at Paris's *Folies Bergère* and other theatres such as the *Casino de Paris*. During her performances her pet cheetah *Chiquita* (in Spanish an affectionate name for a young girl) here seen below presenting her with a bouquet, sometimes became unleashed and would leap down into the pit beneath the stage, to terrorise the orchestra, and to thrill the patrons.



Now we turn to Maria do Carmo Miranda da Cunha (1909-1955), born in Marco de Canaveses in Portugal, raised in Rio de Janeiro, best known as *Carmen Miranda*, or 'the Brazilian bombshell', or as *Chiquita Banana*. Here she is below, also displaying the primary product, in the 1943 Busby Berkeley *chicka-chicka boom chick* movie 'The Gang's All Here' (2). Both Josephine and Carmen died almost immediately after what turned out to be their last public performances. Their funerals were state occasions in Paris and Rio respectively, and streets remain named after them (3).

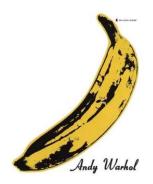


What are the messages for us now? One is that personalised product placement works, and the more stimulating the position, the more effective. Another, a theme of most of the items in my column this month, is that food and nutrition has become narrow, boring and negative. Another is that icons are adaptable.



Thus here above is a celebration of the environmental dimension of nutrition: a ravishing woman in a recent Rio *carnaval* and not much else, adapting the eternal Carmen Miranda image to advertise the need to recycle garbage. This has been a big thing in Brazil ever since the first global environment conference held in Rio in 1992.

No, let's not get into 101 uses for a banana. That's been well done, as you see here and no doubt have seen elsewhere. A memorable example is the Andy Warhol cover art of the original edition of the US release of '*The Velvet Underground and Nico*', with its invitation to 'peel slowly and see' (4).



But can you think of just one current example of really large-scale commercial promotion for any one fruit or vegetable? I cannot. The profit is in processed products. It is too late for Madonna, now well into her 50s, to buck this trend. So who is the most charismatic, talented and beloved by all young woman entertainer of our times, who could boost world sales of oranges, cabbage, or beans, by incorporating mangoes, spinach or lentils into her act? Lindsay Lohan? Paris Hilton? Puh-lease! Use the response facility at the end of this column.

#### Footnotes and references

- 1 For any readers who feel that this item is frivolous, know that Josephine Baker risked her life for the French Resistance in the 1939-1945 war, and was the first US-born woman to be awarded the *Croix de Guerre*. Because of her outspoken commitment to the black cause in the USA, in 1968 she was invited by Coretta King to succeed Martin Luther King as leader of the US civil rights movement. She declined, because of her commitment as mother of her 12 orphan children who she had adopted from all over the world. But anyway, so what if this item is fun? What's the problem?
- 2 Bananas as a primary product are now the fifth biggest staple source of starch in the world, after wheat, corn, rice and potatoes. Production now amounts to over 75 million tonnes a year, which at 100 grams a banana is close to 2 bananas a week for everybody on earth. Almost all exported bananas are one variety, the Cavendish, which replaced the *Gros Michel*, wiped out by blight in the 1960s. Monoculture not just of bananas but specifically of the Cavendish variety will inevitably lead to another blight. The smart move will be to make the market grow, sell, buy and enjoy more of the 300 or so banana varieties. These should include the red- and orange-flesh varieties that throb with carotenoids – see Englberger L, Kuhnlein H. Yes, we have bananas. [Letter]. *World Nutrition* June 2010, 1, 2: 110-112.
- 3 In 1984 United Brands, previously named the United Fruit Company, the US corporation that controlled the economies and the politics of the Central American countries often known as 'banana republics', changed its name to Chiquita<sup>TM</sup>. This has a friendlier feel than its previous nickname of *El Pulpo* (the Octopus). The current logo for Chiquita<sup>TM</sup> bananas features a drawing of a woman looking much like Carmen Miranda, wearing a vast head-dress

made of fruit. It all started with Josephine Baker's cheetah. Not many people knew this – until now.

4 The cover of the UK issue, and all other later issues, did not peel, and so lost all meaning. What was revealed was... a pink banana.

## The context of nutrition

## **Epigraph or epitaph for humanity?**

Industrialism is the systematic exploitation of wasting assets. In all too many cases, the thing we call progress is merely an acceleration in the rate of that exploitation. Such prosperity as we have known up to the present is a consequence of rapidly spending the planet's irreplaceable capital...

Treat Nature aggressively, with greed and violence and incomprehension: wounded Nature will turn and destroy you. [If] we continue to live on our planet like a swarm of destructive parasites, we condemn ourselves and our children to misery and deepening squalor, and the despair that finds expression in the frenzies of collective violence.

> Aldous Huxley In: Themes and Variations. London: Chatto and Windus, 1950

Here above is what may become a regular 'thought for the month'. Help, please – I will prefer quotations from people outside our field who have something to tell us. We understand when we are ready. When this is, we may not know. Ideas have more reality in the South. Our self under our consciousness is wiser, if we allow it. Aldous Huxley wrote the passage above over half a century ago. It gives our work its context.

## **Request and acknowledgement**

You are invited please to respond, comment, disagree, as you wish. Please use the response facility below. You are free to make use of the material in this column, provided you acknowledge the Association, and me please, and cite the Association's website.

*Please cite as:* Cannon G. Burger, shake, fries and statin, please, and other items. [Column] Website of the World Public Health Nutrition Association, September 2010. Obtainable at www.wphna.org

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This column is reviewed by Barrie Margetts and Fabio Gomes. My partner in the New Nutrition Science project is Claus Leitzmann. My thanks also and always to Google, Wikipedia, and the astonishing Guardian On-Line.

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September blog: Geoffrey Cannon **Respond here please**