WN *Columns*

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What do you think?

Geoffrey Cannon



This is the way the world may end, when spirals become vortices. From left, a galaxy; the Tower of Babel; the Arctic ice 'Death Spiral'; the shape of new world storms; money going down the drain

Juiz de Fora, São Paulo. The actions of us humans are driving the planet towards doom. None of us is doing much about this, apart from lamentations and long-life light bulbs. So this column starts with the dark side of spirals – vortices. The galaxy (left) may presage a 'black hole'. The Tower of Babel crumbled. Centre is the 'Death Spiral', the year-on-year shrinking of Arctic ice. Next is the shape of one of the vast storms evidently indicating that world climate has changed. At right is money 'going down the drain'. We have been warned. What will our grandchildren think of us?

Starting below on pages 374-377 I celebrate Pablo Neruda. He embodies my theory that the quality of a nation's diet is reflected in the quality of its poetry. Great poetry is written only in cultures and countries where great everyday meals and feasts are enjoyed in company. It follows that any culture dominated by take-out pizzas and cola drinks and such-like cannot produce great poets. The muse needs nourishment.

So then on pages 377-381 I celebrate Brazilian everyday and special meals. Last month and this, *WN* features the new official Brazilian national meal-based dietary guidelines. Here I celebrate the food prepared in my home by our housekeeper Ana Maria de Nascimento, who having been a cook for bandits and assassins in prison, knows how to turn simple staple foods into delicious dishes and meals.

Finally a suggestion: we should pay attention to 'outlaw' internet bloggers. This month I feature the Icelandic medical student Kris Gunnars, who is gaining traction and getting close to 150,000 Facebook 'likes' worldwide for some of his most aggressive provocations. In particular… well, scroll down to pages 382-385.

Box 1

The recovery of meaning



Celtic spirals, New Grange, c3000BCE. Cretan spirals, c1500 BCE, Canary Island cosmic clock, date unknown. Two installations; Sahara Desert Breath, and a Utah salt lake jetty

When humans mark the earth they may make designs in the shape of spirals. Left are remains at New Grange of the Celtic civilisation of Ireland 5,000 years ago. Next is a maze-like shape made with boulders in Crete around 3,500 years ago. Centre is what may be a cosmic clock found in high mountains in the Canaries. The felt need to express energy and life force in the shape of spirals is not just an ancient preoccupation. Two installations are shown at the right. One is a piece over 100,000 square metres made in the Egyptian Sahara by the DAST Art team led by Danae Stratou, which can be seen from space. At right is a jetty made from 6,500 tonnes of black basalt by Robert Smithson on a Utah salt lake. All of these invite us to sense the experience of life, either moving round and inwards to a centre, passing by the points where we have been; or else to begin in the centre and to move round and outwards while always being close to previous points.

You may think I am preoccupied with spirals. True, although my conscious interest is in the significance of the shape of spirals – what they tell us. We all think and act according to a sense of the shape of things, which typically is not conscious. The model of life and reality that preoccupies practically everybody in those parts of the world that are politically and economically dominant – that have most money, machines and weapons of mass destruction – is that of the straight line. This model is one of constant novelty. It implies indifference or contempt for all that has passed. It is preoccupied with 'growth' and 'development' and confuses both with 'metrics' such as taller physical height, later age at death, and greater turnover of money. It is obsessed with change. In our field, or any area of public life, how often have you read – or made – a policy proposal that what is already being done, especially by 'ordinary' people without expert intervention, is just fine the way it is, and should be protected? Not often, I suggest.

This I hope helps to explain why I begin this series of columns with spirals, and invite you to meditate on them. We have a real chance of getting our topic right, and contributing to the improvement of public health and the protection of public goods, when – and only when – we deliberately and mindfully reject the 'straight arrow' linear model of life and reality, a recent concept in which most of us remain trapped and which is driving us to destruction.

The spiral model implies knowledge and respect for tradition and age-old ways of living and being. It enables us to see that in a real sense nothing is new, and that we have 'been here before'. In the past, in all parts of the world, empires, civilisations, societies and settlements have fallen, decayed or vanished, because the people in those times and places destroyed the resources needed to survive. Now we have 'come here again'. There is no good evidence that we are any wiser than previous human societies. Indeed, knowledge tends to drive out wisdom. To learn the lessons of history, we need first to eradicate from our minds and hearts the notion that life moves ever forward in a straight line. It does not. That way lies the eventual end of any form of secure civilisation. Seeing reality as it always has until recently been seen, as a constantly renewed and revisited spiral which, when things go well, circles outwards to wisdom, puts us on the right road.

Food and nutrition, health and well-being

What they believe: 6. Pablo Neruda Conviviality

Access 1971 Paris Review interview with Pablo Neruda here
Access February 2013 Geoffrey Cannon column on poetry and nourishment here
Access this issue Feedback Marcela Reyes on poetry now in Chile



Pablo Neruda as a young and older man (above left, below right) depicted outside La Sebastiana, his home in Valparaiso (below left). Three books of his poetry including the Canto General for which he won the Nobel Prize (embraced by Pablo Picasso; interviewed in Santiago, above right). A biography, and commemorated on Chilean postage stamps after end of military rule (below centre)

As we devoured freshly caught scallops and drank house white wine in a workers' restaurant in the corner of a street by the docks of Valparaiso, I explained one of my general theories of nourishment to my host, guide and dear friend Marcela Reyes. You can, I said, judge the quality of the food of any country by the quality of poetry about food written in that country. Not prose, whose main appeal is to the mind, but poetry of the type that is written also from and for the gut, heart, and soul. The same theory also works with painting, I said, but let's stay with poetry here.

Take the US and UK. If there is even just one great poem that has been written in either of those countries since the middle of the last century, which celebrates food, or better still, meals enjoyed in the company of family or friends, I am not aware of it. Enjoyment of meals at table is a central pleasure and achievement of societies and civilisations. It is, I propose, impossible to become a great poet, and certainly a great poet whose verse does indeed engage all our sensibilities, in countries whose food supplies have become degraded and homogenised. It is easy to imagine a *verse or art about a cheeseburger,* but this would surely be ironic.

Marcela, who is a physician as well as a public health nutritionist, did not give me any argument, for she is Chilean, and we were in one of the cities where Pablo Neruda

(1904-1973), the greatest modern poet from Latin America, had lived. All I was doing was trying to explain to myself – and now to you, here – what she already knew, in her blood and bones. That day and also on a previous visit, we had walked up to and visited La Sebastiana, his Valparaiso house, past the beautiful graffiti on the street walls outside (above left, below right) that depict Neruda as the young lover and writer age 20 of *Twenty Love Poems and a Song of Despair* (1924, above, second to left), and as the older collector of shells that spoke to him of ocean (below, right).

In Latin America Pablo Neruda remains in the hearts and minds of millions of people from all classes, for one or more of at least five reasons. One is the *Twenty Love Poems*, translated into uncounted languages, and spoken and sung throughout Spanish Latin America. Two is his *Canto General* (1950), the whole story of his continent that above all won him the Nobel Prize for Literature (1971, pictures above, right). Three is his career as a politician, a Communist, comrade of Pablo Picasso (above, second to right), from 1945 a senator representing workers in the Atacama desert, a fugitive from repression, and for a while in 1969-70 a candidate for president of Chile before Salvador Allende was selected. Four is his death in 1973 two weeks after the coup that overthrew the socialist government of Allende and began the Pinochet dictatorship, of cancer, a broken heart, and some say of poison.

Food for feelings

A fifth reason is his love of meals, feasts and parties centred on food and drink shared with comrades and friends, which lives after his death in his verse. He writes of food even in his political poems, such as 'I'm explaining a few things' from *Tercera Residencia* (1947), his lament for his friend Federico García Lorca, murdered a decade before. Here is something of what he saw of the Spanish War, the experience that politicised him:

> Federico, do you remember…
> Everything
> loud with big voices, the salt of merchandises,
> pile-ups of palpitating bread…
> metres, litres, the sharp
> measure of life,
> stacked-up fish,
> the texture of roofs with a cold sun in which
> the weather-vane falters,
> the fine, frenzied ivory of potatoes,
> wave upon wave of tomatoes rolling down to the sea

Then

> And one morning all that was burning …
> and the blood of children ran through the streets
> without fuss, like children's blood.

His celebration of food and of conviviality and commensality is best expressed in some of his *Elemental Odes* (1954, 1957, 1959). These are all verses written to be recognised and enjoyed by the common people. Thus, 'Ode to maize':

> Strength-giving, nutritious
> cornmeal pulp,
> you were worked and patted
> by the wondrous hands
> of dark-skinned women.
>
> Wherever you fall, maize.
> whether into the
> splendid pot of partridge, or among
> country beans, you light up
> the meal and lend it
> your virginal flavour …
>
> With your husks,
> like gentle kernels,
> our sober provincial
> children's hearts were nurtured,
> until life began
> to shuck us from the ear.

Then there are the odes to an artichoke, to a chestnut on the ground, to tomatoes, to wine, to a boy with a hare, to a large tuna in the market, to the lemon, to salt. But let's choose 'Ode to conger chowder', here copied with longer lines than in the verse as he wrote it:

> In the storm-tossed Chilean sea lives the rosy conger, giant eel of snowy flesh.
> And in Chilean stew-pots along the coast was born the chowder,
> thick and succulent, a boon to man.
> You bring the conger, skinned, to the kitchen (its mottled skin slips off
> like a glove, leaving the grape of the sea exposed to the world),
> naked, the tender eel glistens, prepared to serve our appetites.
> Now you take garlic, first caress that precious ivory smell, its irate fragrance,
> then blend the minced garlic with onion and tomato
> until the onion is the colour of gold
> Meanwhile, steam our regal ocean prawns, and when they are tender,
> when the savour is set in a sauce combining the liquors of the ocean
> and the clear water released from the light of the onion,
> then add the eel, so that it may be immersed in glory, that it may steep
> in the oils of the pot, shrink and be saturated…
> Then slowly deliver the treasure to the flame
> until in the chowder are warmed the essences of Chile,
> and to the table come, newly wed, the savours of land and sea.
> So that in this dish you may know heaven.

Love of food

Yes, the quality of diets, personal, national, global, is among the main determinants of states of physical health. Yes, this needs to be better known at all levels from parents at home to national governments. Yes, the chance of getting serious and deadly diseases is affected by what we eat. Yes, hundreds of millions of families throughout the world are food-insecure. Yes, millions of children suffer from nutrient deficiencies. Yes, a life spent defending healthy dietary patterns and resisting the penetration of transnational corporations, can be a life well-spent. All, true.

And yet, the preoccupation of nutrition with states of human physical health, which in effect sort-of positions the discipline as a branch of allopathic medicine, is a sad and foolish diminution of nutrition as properly understood. Sad, because it occupies tens of thousands of intelligent and trained professionals in what are, much of the time, trivial tasks. Foolish, because the focus on just one aspect of health as properly understood, without discerning the big picture, makes for mistakes – so many! One example will do: the great protein fiasco (1). Don't get me going, there are lots more!

Pablo Neruda was a big drinker, he got fat, he was quite often ill, he got cancer, and he died before he was 70. Would he have stayed healthy and lived another 15 years had he followed some Latin equivalent of the Dean Ornish low-fat diet? Possibly. Would his genius have flowered had he been abstemious? Very unlikely, I suggest, because he was altogether a person of what these days are seen as extremes. His risky and riotous life, expressed in his poetry, has created a vision of a whole continent which continues to inspire Latin Americans. Part of all this is his love of food. Living in lands inside and outside Latin America where meals and feasts made with foods fresh from local markets are an integral part of ways of life, fuelled his genius. Pablo Neruda tells us what nourishment, of the body, and the mind, heart and spirit, is all about. Read more in a *1971 Paris Review interview.* So he is my hero here.

Box 1

Selected books by and about Pablo Neruda

Twenty Love Poems and a Song of Despair (1924). Residence on Earth I and II (1933, 1935). Third Residence (1947). Canto General (1950). The Captain's Verses (1952). Elemental Odes (1954, 1957, 1959). One Hundred Sonnets of Love (1959). The Rocks of Chile (1961). Ceremonial Songs (1961). Fully Empowered (1962). Memory of Isla Negra (1964). The End of the World (1969). His complete works are published in Spanish. Many selections of his poetry in English are translated by Nathaniel Tarn, WS Merwin, Alistair Reid, William O'Daly, others. Biography: Adam Feinstein. *Pablo Neruda: A Passion for Life (2004).*

References

1 McLaren DS. The great protein fiasco. *Lancet* 1974, **304**, 7872, 93-96. doi:10.1016/S0140-6736(74)91649-3

Brazilian cuisine, feasts and everyday meals
Good appetite!

Access March 2014 Update on the Brazilian meal-based guidelines here

The golden rule
Always prefer foods and freshly prepared
dishes and meals to ready-to-consume products,
and avoid ultra-processed products



Brazilian main dishes for everyday meals, made from fresh or simply processed foods, as in the Guia. From top left, salad and cashews, rice and vegetables, cassava and green onions; fish and potatoes

For the last two years I have been a member of the team led by Carlos Monteiro of the School of Public Health at the University of São Paulo. We have been commissioned by the Brazilian Ministry of Health to draft the second official *Guia Alimentar* (dietary guidelines) for the Brazilian population. As I write, the *Guia* is in its final draft form and is out for consultation. Its overall 'Golden Rule' is shown above.

The *Guia* is not so much nutrient- or food-based, as meal-based. It includes the pictures above as examples of relatively simple main dishes for everyday meals. These include foods abundant in Brazil, are easy to prepare, and apart from the fish are cheap to acquire as well as simple to prepare and cook. (Fish is cheap too, for people who live near the ocean or rivers). Dishes and meals like this are what the *Guia* is all about. The examples here include foods native to Brazil, such as cashew nuts and cassava (manioc), and this is deliberate, for Brazilians have good reason to be proud of their original, traditional and established dietary patterns. Such dishes and meals can also be adapted to suit the people of all countries. The principle is the same. Enjoy meals! As people say in Brazil – *Bom apetite!* Good appetite!



Pictures of food tell only a part of the experience of enjoyment that make freshly prepared meals so nourishing. But which pictures of people to choose? Brazil includes so many rich and various cultures

What is missing from the pictures of everyday Brazilian meals, though, is how dishes are typically served in Brazil, in pots and plates brought to the table for family members and others to select. What is also missing is the sense of commensality and conviviality coming from eating delicious meals together in pleasant surroundings.

In Brazil it is impossible to find a manageable selection of pictures that conveys a national mood, because the cultures, origins, tastes and incomes of the peoples of Brazil are so varied. A picture of a middle-class family round the meal table at home in a big city is one reality. Another is the meals shared by *quilombistas*, people living in communities founded by escaped slaves. A third is family meals in communities with very low incomes in rural areas of North-East Brazil. And above is a fourth reality – food being prepared in the state of Bahia, where African ways of life are strongest. Food should not be separated from eating. Nutrition is part of nourishment.

Working for Brazil

Work on the *Guia* has been challenging. Brazil has a population of 200 million and is the size of the US minus Alaska. The culture, ways of life, and staple foods such as grains, roots or tubers, vary from region to region, from the North and North-Eastern states close to the equator, to the South-East sub-tropical region with strong Italian and German influences, to the biggest cities that are as cosmopolitan as any in Europe. The range of family income and education and type of employment is very wide in all regions; and especially in the North-East and the *favelas* (shanty-towns) throughout Brazil, patterns of diet and of disease approach those in Africa. This means that the *Guia* has addressed food insecurity and undernutrition, now rapidly decreasing though still endemic in some areas, as well as overweight and obesity,

now rapidly increasing in all regions and among all classes, and projected unless checked to be much the same as in the US, Mexican and UK around 2025.

Preparation of the *Guia,* working with the Ministry of Health, the Ministry of Social Development, and the Pan American Health Organization, has involved consultation and guidance with health and nutrition professionals from all over the country. The process has shown us Brazil at work as a participatory democracy. Having been involved with UN and other international reports, I know about the 'top-down' processes assumed to be necessary in other countries. The *Guia* is I believe the first of its kind to be a product of specialists working with other professionals, and with representatives of communities, and with 'ordinary' people themselves.

The meal-based guide

The *Guia* is meal-based in a very specific way. Its recommendations derive from the actual meals consumed by that 20 per cent of the population of all classes whose diets are based on freshly consumed meals and who consume only small amounts of ultra-processed products. In these sense it is more real than any other dietary guidelines report I know of. Putting the guide's recommendations into practice, though, involves distinguishing between feast food such as the gut-busting meat and bean *feijoada* stew with rice, oranges, kale and manioc grits washed down with beer and powerful *caipirinhas* made with *cachaca,* lime, ice, sugar with mint (first row below) or the exquisite fish dish *moqueca capixaba* followed by passion fruit mousse (next row). There is a tendency when celebrating the food of any country or region to focus on 'recipe' dishes and meals, but these are of course only for special occasions. The *Guia's* recommendations are firmly based on the everyday meals that are actually prepared and consumed by Brazilians.



Brazilian feast meals, not for every day, include gut-busting feijoada washed down with caipirinhas (pictures above) and exquisite moqueca capixaba followed by passion fruit mousse (pictures below).

Dona Ana and the prisoners



Here is our housekeeper Ana Maria de Nascimento, with a basic meal made for our builders and for us. The other pictures are of some of her masterpieces, all based on simple economical fresh food

Now I can show you what everyday Brazilian freshly prepared dishes and meals are all about. The woman top left is Ana, our family housekeeper in my home. She does not use cookbooks. For four years she prepared meals for bandits and assassins (as she describes them) imprisoned in the nearby town of Lima Duarte. Her weekly main meals were meat with manioc grits and potatoes or pasta, with fresh vegetables and salads, and some fruits – bananas, apples or oranges. The villains ate well.

In the picture with her, is the main midday meal for the builders now in our house – the Brazilian rice and beans (above) and also (below) chopped *couve* (kale) and a thick stew based on *inhame,* a tuber a bit like a yam, always cheap in the shops, believed to have healing powers. Do not imagine that we left all this for the workers!

The other pictures are three everyday masterpieces. Top right is one of my big daily salads, with green leaves and stalks from our garden, tomatoes, onion, garlic (plus because it's me, olive oil, balsamic vinegar and sea salt). Below are dishes of different days for all the family. Left is a classic from our state of Minas Gerais: *tutu*: mashed beans to which he adds a lot of hard-boiled eggs, sausage, and greens. Right is her own dish of *gilot,* a bit like okra, also cheap in the shops, with greens and pasta.

Dona Ana prepares and cooks simple delicious economical fresh dishes and meals just like those recommended in the new national *Guia*. So I have told her, for she can be proud. For me she proves that the *Guia* is not an expert theory imposed on populations, as other guidelines are. Ana makes the *Guia* real, every day at home.

Food, nutrition and health

Outlaw notions





Kris Gunnars (above), an Icelandic fitness trainer and nutrition sleuth, has an in-your-face website AuthorityNutrition, much accessed worldwide. Anti-sugar, pro-meat, he is a man with a mission

'Pay no attention to cranks and quacks', is the standard orthodox nutrition line. 'They are all in it for the money or notoriety. Or else they are food terrorists' (or Leninists or Taliban) 'wanting to pull down the pillars of society'. Well, there sometimes can be some truth in these sneers and slurs, but it is unwise to ignore all those who seem to have crazy ideas. They may not be MD PhD and so forth, but to quote the Stonewall activists 'We're here. We're queer. Get used to it'. Some have a lot of traction. And some of what some of them say may turn out to be correct.

Denis Burkitt told me that if he had not been FRS, as a result of diagnosing the lymphoma that bears his name, his ideas about dietary fibre would have been derided as crackpot. Before Denis, Thomas Allinson was booted out of the British medical profession for preaching the vices of drugs and the virtues of wholegrains. So you never can tell for sure. Perhaps this column should run a series on outlaws, renegades, snake-oil salesmen, and indeed food Leninists, terrorists and Taliban.

Icelandic man in your face

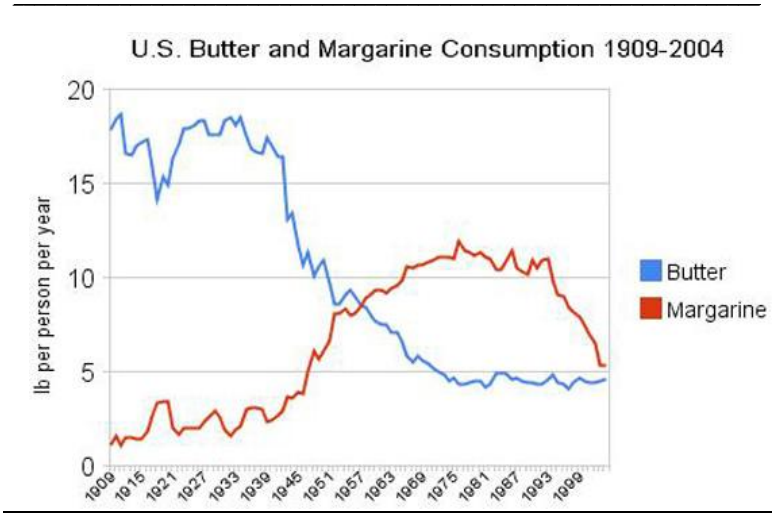
Here for a start is Kris Gunnars. He is a 27 year-old medical student and fitness trainer from Reykjavik, and a self-taught nutrition sleuth, whose *authoritynutrition.com* site has over 85,000 'likes'. He says that the site 'helps people make informed decisions about their health based on the best scientific evidence available'. He claims that orthodox nutrition is dead wrong. He is aggressive. 'There is an immense amount of incompetence in the areas of nutrition, weight loss and disease prevention. My goal is to change that and this website is part of my mission', he says. His 'Top 11 biggest lies of mainstream nutrition' blog has gained 139,768 Facebook 'likes' as of late March. His style, as you can tell from the titles of his blogs and his projection of himself (above, with skull) is 'in your face'. Maybe some social media-savvy readers of *WN* sneak a look at AuthorityNutrition once in a while.

Media amplification

Recently I stumbled across AuthorityNutrition, because a typical Kris Gunnars confrontation, 'Eleven graphs that show everything that is wrong with the modern diet' (1) was amplified by the *Daily Mail*. This UK newspaper has a readership of around 4.25 million, approaching 10 per cent of the UK population. Its health including nutrition coverage is often rather good. As *WN* readers will have seen, items in the *WN Update* section sometimes follow up a *Daily Mail* story.

More significant, *Mail Online*, its electronic version where the 'eleven graphs' were all displayed, has morphed into a series of blogs only loosely connected with the print version, with a worldwide reach. Its 'unique web browser' figure has rocketed from around 130 million in May 2013 to 190 million in January 2014, or well over half a million a day which, says Wikipedia, makes it the world's most accessed news site. So what with one exposure and another, the 'eleven graphs' and their overall message, included in *Mail Online* straight off the AuthorityNutrition website with supporting comment by Zoë Harcombe, author of the Harcombe Diet, have probably been scanned by let's say a quarter of a million motivated readers all over the world.

Below is one of Kris Gannars's eleven graphs. Readers of *WN* have seen it before. It shows butter and margarine consumption in the US from 1909, when the fat in margarine became hydrogenated, to 2004. If butter, with its saturated fat content, was an important cause of coronary heart disease, the graph is intriguing. The line that rises in parallel with heart disease rates is that of margarine, up to the late 1960s, when it peaks and then, after the toxicity of *trans* fats in margarine became known and margarines were reformulated, falls. The graph fuels the AuthorityNutrition conclusion that butter, and – now for the jump – saturated fat, never was a cause of heart disease. The finger points at *trans* fats, and thus at margarine.



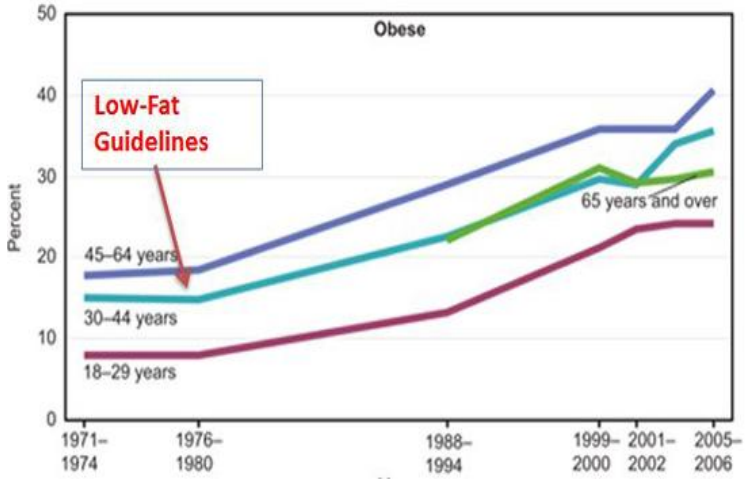
If butter, an important source of saturated fat, is a cause of coronary heart disease, why does the consumption of butter fall at the time when rates of heart disease, and margarine consumption, rise?

Well, one graph does not make a theory, and in the second graph, shown below, Kris Gunnars switches to obesity in the US. The red arrow points to 1977, the time of publication of the US Senate Select Committee 'McGovern' dietary goals report. It was the most comprehensive and most publicised report of its kind in the US. It set a goal of reduction of total fat consumption from around 40 per cent to 30 per cent of energy intake (expressed as a range of 27-33) and of saturated fat from around 15 to 10 per cent (a range of 8-12). Tips focused on meat, milk, cheese and eggs, with not much attention given to fast foods or snack products.

McGovern also recommended less dietary cholesterol, sugar, and salt, and more vegetables and fruits. Nobody took much notice of its recommendation on sugar, which was stringent, from 18 to 10 per cent. The nutrition science establishment and US government agencies agreed, and food producers and manufacturers concurred (more or less) that the big job was to get consumption of fat and saturated fat down. And indeed, in the US from 1980 to 2005, total fat consumption did fall, to around 33 per cent of total energy, as did that of saturated fat, to around 11 per cent, and rates of heart disease also fell. But rates of obesity doubled, and in young people almost trebled. The consensus position of the 1980s was that diets good for the heart are also protective against obesity. This position is now destroyed. Whatever is causing rocketing rates of obesity, it is not rising rates of dietary fat and saturated fat.

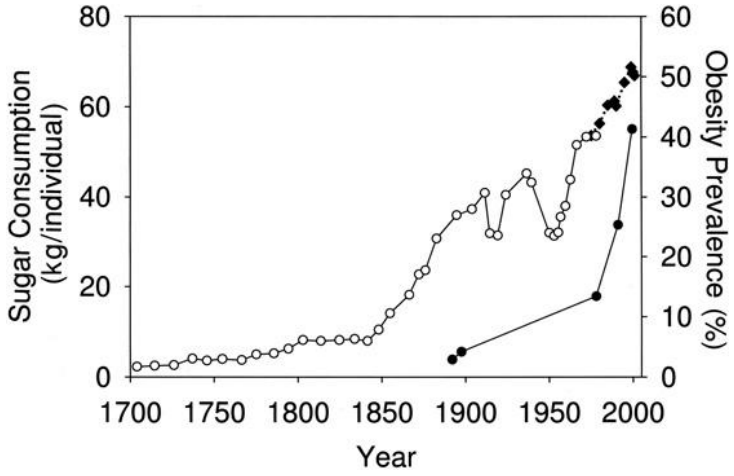
So we can begin to see where Kris Gunnars is coming from. The first graph suggests that butter is not a cause of heart disease, but margarine is. The second graph shows that conventional dietary guidelines (there were of course many more after McGovern, all with similar recommendations, except that sugar became increasingly downplayed) correlate with rapidly increasing prevalence of obesity.

US dietary guidelines on dietary fat correlated with rates of obesity, 1971-2006



The strongest official US dietary goal consistently agreed since the late 1970s has been to reduce consumption of dietary fat and saturated fat. This has happened, but rates of obesity have rocketed

UK and US consumption of sugar 1700-2000 correrelated with rates of obesity in US whites 1900-2000



Over the centuries the correlation between consumption of sugar and rates of obesity is impressive. The extent to which added sugars and syrups consumption has increased since the 1980s is contested

The third graph, above, comes from a paper in the *American Journal of Nutrition* (2), which is a bit muddled, because the line showing increase in sugar consumption includes UK as well as US estimates. But consumption of sugar in the US has risen over the decades and now, with sugars added in the home, is around 15 per cent of energy intake, and often more with young people. That is massive.

These are just three of the AuthorityNutrition 11 graphics. Some of the others show where people in the US eat (more and more out of the home); consumption of sugared soft drinks *vis a vis* milk (the lines cross); consumption of oils (in particular aggressively processed soya oil, rocketing since the late 1980s).

So what does Kris Gunnars conclude? 'Everywhere modern processed foods go, chronic diseases like obesity, type 2 diabetes and heart disease soon follow', he says. 'When people abandon their traditional foods in favor of modern processed foods high in sugar, refined flour and vegetable oils, they get sick'. All very unscientific… but am I suggesting that we professionals should take some of the outlaw internet blogs on nutrition and health seriously? Maybe I am. Maybe you already do.

References

1 Gunnars K. Eleven graphs that show everything that is wrong with the modern diet. 11 February 2014. http://authoritynutrition.com/

2 Johnson R, Segal M, Sautin Y et al. Potential role of sugar (fructose) in the epidemic of hypertension, obesity and the metabolic syndrome, diabetes, kidney disease, and cardiovascular disease. *American Journal of Clinical Nutrition*, 2007, **86**, 4, 899-906