WN Columns

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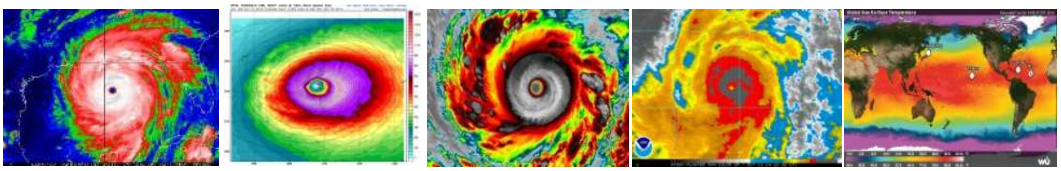
What do you think?
Geoffrey Cannon



Vortices. Katrina, 2005: $US 100+ billion damage. Gonzalo in Bermuda, Vongfong in Japan, Hud Hud in India, all three in 2014 as this is written. Right, ocean hot zone breeding hurricanes

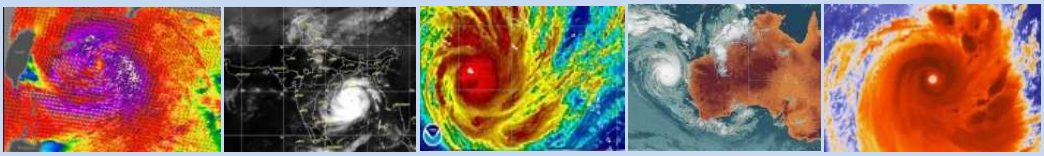
São Paulo, Rio de Janeiro, Juiz de Fora. On other pages of this issue of *WN*, the life, work and vision of *Tony McMichael is celebrated.* One of the slides he used, of the warming of ocean currents, is above, right. The 'eyes' of the vortices of hurricane Katrina, and of three vast storms raging as this is written, are also shown above.

As well as writing this column, always designed to encourage responses, I am as readers may know, the editor of *WN*. This month includes reflections on the nature, craft and purpose of editing, which is or should be a process of shaping, naming, making, envisioning, and creating. This has been prompted by the death of one of my mentors, *Karl Miller*, who in the UK was an editor at *The Spectator* and the *New Statesman*, then editor of *The Listener* where I worked with him for a while, and finally founder-editor of the *London Review of Books*. Karl shaped the culture of his time, such that thinking people in the UK, and elsewhere too, can have a richer and deeper sense of living and moving in the world. In the field of public health successive editors of *The Lancet* are examples. Great editors have this effect.

After celebrating Karl, there are three more items, all associated. One is on the meaning of words and terms as translated, an example of which, from Portuguese and English, is why *alimentação* means more than 'food' or 'nutrition'. The next and related item is on the likely impact that methods of processing have not on nutrition (in the sense of chemical composition) but on nourishment (the broader concept, including effect on human health). Then some first thoughts about that end of the rainbow for science, 'objectivity', concern for which, I tentatively suggest, makes nutrition seem to be less interesting and important than it actually is.

Box 1

Stormy weather



Above are the vortices of recent great storms. 2009: Morakut, Taiwan. 2012: Phailin, India. 2011: Yasi, Andhra Pradesh. 2006: Larry, Australia. 2012: Michael, Bermuda. Watch out!

Is the change of global climate a reason why great storms, some of whose 'eyes' and vortices are shown above, are now more common and more destructive? Surely, yes. True, typhoons and hurricanes are now pictured more vividly, from space. True, great storms are devastating acts of nature known in prehistory and recorded throughout history – thus, 'Shakespeare' writes in *Lear*:

> Blow, winds, and crack your cheeks! rage! blow!
> You cataracts and hurricanes, spout
> Till you have drench'd our steeples, drown'd the cocks!
> You sulphurous and thought-executing fires...
> Smite flat the thick rotundity o' the world!

True also, that the rapidly expanding science of climate includes scholars who cautiously conclude that more research is needed. But surely we all agree with Tony McMichael's position, which is that the evidence is good enough as a basis for a revolution in world governance. With very many other scientists he also warned that at some point in the first half of this century, unless very resolute changes are made to prevailing global political and economic ideology, policy and practice, Earth's doom may well be sealed. The one prudent – indeed, sane – position, is to accept and act on the fact that change in climate is a global crisis whose eyes are staring us in our faces.

WN editorial family member Mark Wahlqvist, previous president of the International Union of Nutritional Sciences, has just *sent us his brilliant chapter* from a new book of essays on climate change and its implications. In it he refers to the 2009 typhoon Morakut, whose 'eye' is shown above, and whose effects in Taiwan, where Mark has a home, are shown below. So what caused the typhoon? Given the answer is: climate, at least in part, the question then, to which we surely know the answer, is: what now causes climate change?



Results of the impact of the 2009 typhoon Morakut on Taiwan. The memorial of stones on the right is for the 500 villagers of Xiao Lin, killed in a mudslide caused by the great storm

Food and nutrition, health and well-being

What they believe: 12 . Karl Miller
The editor as alchemist



Karl Miller (above, left and right), who died in September, is the impresario of much of the most accomplished English writing in the last half century. He nourished generations of readers of the weekly journals the Spectator, then the New Statesman, and (below) then The Listener and founder-editor of the London Review of Books. He promoted poets who remained close to nature such as Seamus Heaney (above) and James Hogg (below) and his own books include two memoirs (below).

This story apparently celebrates literary editing in the UK, and commemorates a unique editor. Yes, it does, but it is also about the whole craft and art of editing, any time, anywhere, in all fields, nutrition and public health included. Everybody whose writing is published is edited, in some sense. So I suggest that we need to see the significance of editing. What prompts me is the recent death of Karl Miller, one of my mentors. He learned his profession as an editor at the UK weekly journals the *Spectator*, the *New Statesman*, then *The Listener* (lower row, left) which is where I worked with him. He nurtured very many writers including Nobel prizewinning poet Seamus Heaney. He also became professor of English literature at University College, London, combining this with co-founding and editing the *London Review of Books*.

Karl had a hard-learned and hard-earned luminous quality. He was a literary editor in a grand sense. This included gastronomy – a cover of his *London Review of Books* above features *Emma Rothschild on the food culture of Hangzhou* and its place in ancient imperial China. But that is by the way. Karl understood editing. He practiced it every day, becoming a maestro. Romantics like me claim that political, social, cultural and other movements are identified, catalysed and amplified by the editors of periodicals. Created, even! Great editors discover and transmute the spirit of their age. They are alchemists. This is how so many people see Karl.

Box 1

Karl appreciated

Extracted and adapted from the obituary in the New Statesman, 26 September 2014.
Karl Miller's first proper job began in 1958 as literary editor of the right-wing weekly political journal, the *Spectator.* He remembered it as 'a jolly sort of paper' whose 'displays of brilliance and impudence looked forward to the satirical sixties' in the UK. He moved to the left-wing weekly *New Statesman* in 1961. This required 'no gymnastic leap'. He found the best writers from the universities, as well as expert jobbing writers. His favoured contributors included the distinguished historian Eric Hobsbawm, who wrote about jazz under the name Francis Newton. The *NS* was in a great period – weekly circulation around 100,000 – and Miller's pages were admired. He had no fixed agenda, though his commissioning showed a strong egalitarian streak. He nurtured writers from the Commonwealth such as the South African novelist Dan Jacobson and the Trinidad-born Indian VS Naipaul.

In 1967 he was appointed editor of *The Listener*, a BBC weekly originally meant to reprint radio talks, but which long before had flourished as independent and unaligned. It had a smaller circulation but plenty of influence. It had become tired. Karl breathed it into new vigour. One of his first moves was to ask fellow editor and wit Mark Boxer to contribute a regular cartoon. He continued to commission academics with a light touch, and journalists with scholarly authority.

The poet and critic William Empson, after seeing a copy of the magazine, said that Miller seemed to be doing 'all right.' while the eminent poet WH Auden on meeting Miller, said: 'You are the man who ruined *The Listener*'. While there he continued to publish the poets he loved, such as Philip Larkin and Seamus Heaney, and also became part of a new move, an extension of sixties counterculture, to destroy hierarchies. His colleague Blake Morrison told me that Miller showed him how editing worked – 'how when you pause over a choice of word, you can also open up a discussion about ideas, history, etc, as well as language.'

In 1973 Miller left *The Listener*, after a dispute with the BBC about the direction of the journal. He landed on his feet again when Frank Kermode vacated the position of Northcliffe professor of English literature at University College, London. With him there the job united journalism and academia. Bestsellers were added to the syllabus, and even movies.

Kind of hip

In 1979 Miller co-founded the *London Review of Books*. His time on the *LRB* coincided with the regime of Margaret Thatcher, just as his time at *The Listener* had coincided with the Vietnam war and the student protest movement. He brought light into these obscurities. As well as bridging scholarship and journalism, high culture and low culture, he included political commentary. Many of the *LRB*'s controversies, in those years as today, related to challenging ideas and ideologies expressed in its pages.

At the *LRB*, Miller published a new generation of essayists and reviewers. One remembered Miller as 'the only editor I've known who edited poems as if they were prose. It wasn't beyond him to suggest the removal of lines or the scrapping of stanzas – even, on a good day, of an entire poem.' After identifying a word in a hand-scrawled Allen Ginsberg poem as 'illuminating' rather than 'illustrating', Miller took his small cigar out of his mouth and said 'I've never edited a poem before. But, in this case, it feels kind of hip'.

Working with Karl

My own experience with Karl in the late 1960s was a shaping force. In those days I knocked around with young media moguls like David Frost. In London the middle-aged men who had controlled the media including the BBC, were desperate to be told what to do, and even to be taken over, by cocky hipsters. Dear long gone days!

Having agreed to revive *The Listener* as part of the BBC's panicky shake-up that included the creation of the Radio 1 pop music channel, Karl worked in the Langham, once (and again now) one of the fanciest hotels in London, which had been turned into BBC offices for staff overflow from Broadcasting House opposite.

The Listener was on the third floor of palatial chambers with high ceilings and big windows. The building, designed to be serviced by hot and cold running servants, had become a bit grubby, but even so, it gave a sense of wonder to visitors in those days when anybody could wander in. To go up you chose between creaky Edwardian lift with brass buttons or the grand staircase that wound round the elevator. Karl's big office was stylish and austere, like him. It had a great iron rattling radiator behind which, so it was later said, he stuffed furious memoranda from BBC bigwigs.

In a tight-lipped way, Karl was glamorous. He had a fine line in dry irony. Celebrated writers would stand and shake and sweat beside him as he sat silently examining their copy. It is said that some begged to take their wretched drafts away for a radical rewrite even before he spoke. But if you seemed to please him, such bliss!

He transformed *The Listener*. My job was as its designer. Our first issue (see above), was number 2001. For the cover we agreed an iconic photograph of the charismatic book publisher Tom Maschler and the 'underground' poet Allen Ginsberg reading about Rudolf Nureyev and Margot Fonteyn being arrested for smoking dope in San Francisco's Haight-Ashbury hippie district. Inside, Karl had commissioned the cartoonists Mark Boxer and Barry Fantoni. The cover features were the poet Thom Gunn on rock'n'roll, and the journalist John Morgan on flower power. One of the radio transcripts on which the paper was founded, was the Marxist scholar Isaac Deutscher on *Das Kapital*. The whole issue, sitting on my desk now, was – is – wonderful. It was the continuation of a new world. Or so we felt.

Karl and I blissfully checked the galleys and the page proofs. Then we went to the printers, Waterlow's in Park Royal, and ecstatically supervised the first copies of 2001 running off the giant presses built for the multi-million print-run of the BBC television and radio journal. In those days newspapers were printed letterpress on thin paper. Our newsprint was thicker, with no show-through. We had one colour, only for the cover titles. That was it. Within our resources Karl and I both knew that we had got it right, and that from then on under Karl, *The Listener* was, in print, as good as anything the BBC could do on television and radio. Or so we thought.

Box 2

Karl understood

Part of an appreciation by Karl in the London Review of Books, 23 September 2010.
A few weeks ago I visited Frank Kermode in Cambridge. I had known him for 52 years, and for much of that time I had been his editor. Originally I had been warned against him. I was told that he combined the faults of the academic and of the journalist. Frank did not agree that scholar and journalist were two different people. His writings were an undivided source of enlightenment. He did not want to be, as he put it, 'impressively arcane'.

Some weeks before then I went with friends to visit the grave of the Anglo-Welsh metaphysical poet Henry Vaughan. We read aloud a passage from Vaughan's 'great poem', as Frank rightly called it, 'The Night'. The passage was discussed by him in a sermon, by no means arcane, delivered in King's College Chapel on 11 May 1986. The passage reads:

> God's silent searching flight,
> When my Lord's head is fill'd with dew, and all
> His locks are wet with the clear drops of night; His still, soft call;
> His knocking-time; the soul's dumb watch,
> When spirits their fair kindred catch.

The sermon is about the enabling errors whereby writers repeat and reverse what has been said before them, and Vaughan's passage draws on a passage from the *Song of Songs*.

> I sleep, but my heart waketh: it is the voice of my beloved that knocketh, saying, Open to me, my sister, my love, my dove, my undefiled: for my head is filled with dew, and my locks with the drops of the night.

Frank loved literature. It took him into a world of light. These last words can hardly mean to us what they did to Vaughan in the 17th century. But they have yet to lose their meaning.

Reflecting on Karl

Now here comes the application of all this to the business of preparing – and editing – and publishing contributions to specialist journals, such as those concerned with public health and nutrition.

Do you consider the process of editing, or think about editors? Perhaps not. Most contributors of original papers to scientific journals probably see most editors (and reviewers) as irritating un-named barriers between their 'papers' – as reports of original research are called – and publication. The feeling is rather like exposing your stuff for inspection to check-in and immigration and customs officers at busy airports, knowing that if what you have in your bags is too much you will have to repack them, that items seen as inappropriate will be binned, with admonitions if they are sharp or explosive, and that if your documents are not in order you will be delayed.

But such typical frustrations between submission and publication of papers on public health or nutrition in specialist journals, do not involve editing, as I understand the concept of editing and the vocation of editors. The main function of such journals is

as repositories. Preparation will involve only text- or copy- or line-editing, skilled crafts designed to ensure that papers have followed the often rigid rules for contributors, and that anything fuzzy, ambiguous, contradictory or mistaken missed during review, is resolved.

Such work falls short of what I mean by editing, as exemplified by the great pathologist, epidemiologist and politician Rudolf Virchow's *Archives for Pathological Physiology and Anatomy and Clinical Medicine* (or *Virchow's Archives* for short), or by *The Lancet* for much of its history, as for example edited by its founder Thomas Wakley, or its current editor Richard Horton. Here come my considerations on what editing is and should be all about. These I think apply to all published writing, including in scientific journals concerned with public health and nutrition.

Learning from Karl

What I have learned is as follows. First, everything that is worth saying can and should be said clearly. This is a version of Albert Einstein's 'everything should be made as simple as possible, but not simpler'. Second, the art and craft of editing is interlocutory, knowing how to engage the writer with the reader (or speaker with listener). There is magic in this. Third, the design and sequence of words (or the rhetoric and modulation of speech) must be attractive, amplifying while staying faithful to the meaning of what is written (or spoken). Fourth, while the range of talent, energy, fortune, courage, imagination and intelligence in humans is vast, we can all basically understand one another. All forms of autocracy or priesthood are bogus. Fifth, at some times, an editor may be a statesman, even a magus, identifying, announcing and bringing a new age into being. Most and maybe even all cultural, social and political movements in modern times have been and still are sparked by regular sustained writing in the form of manifestos, tracts, pamphlets – and journals.

When I worked with Karl I was in my late 20s and he was in his late 30s – the first picture above shows what he looked like then. We worked together joyfully in 1967, the year of the Beatles' 'White Album', and (more to the point for me) the great year of Californian bands like The Doors, the Jefferson Airplane, Love, and the Steve Miller Band. Karl had a foot in that door. He paced around his big office, complaining about getting old. Meeting him 40 years later, at a book launch party in 2007, I reminded him of this. 'It's true now' he said. And so it was.

Box 3

Editing by Karl Miller

The Spectator (literary editor, 1958-1961). *The New Statesman* (literary editor, 1961-1967). *The Listener* (editor, 1967-1973). *London Review of Books* (co-founder, editor, 1979-1992). His books relevant to his editing are *Rebecca's Vest* (1993) and *Dark Horses* (1998).

Words, terms

Watching our languages

Access June 2013 Geoffrey Cannon column on language here
Access October 2013 Geoffrey Cannon on words and terms here



In Brazil, what is shown above, made from cassava, is called 'farinha', usually translated as 'flour'. But it is very different from the white powder made from wheat used to make bread, cakes and pies

What words and terms mean, or may mean, matters. This applies in nutrition as much as in any other field. A decade ago Ricardo Uauy and I agreed that a lexicon is needed for all commonly used nutritional terms. The job still needs to be done. One reason is that the same word, term or phrase is often used in different meanings. This needs handling.

What is 'nutrition'?

The point is made by thinking about 'nutrition'. Does everybody involved agree what this term means? Do all concerned agree what the UN International Conference on *Nutrition*, being held this month, is all about? No, they do not. When professionals discuss nutrition, as colleagues, panel members, report drafters, and so on, they do not base their work on agreed defined terminology. So discourse slips and slides.

Being clear in one language is tough enough. Different languages complicate the point. Many words and terms translate readily into other languages, and have the same meaning – more or less. But some do not. This may be by chance or mistake, or it may signal something much more significant, which is different ways of doing or being. The examples here are in Portuguese and English, and I expect to be corrected by Brazilian colleagues. Responses, please.

So what is 'flour'?

The examples are, in English, 'flour' and 'nutrition'. The Portuguese word *farinha* is usually translated as 'flour', and *alimentação* is usually (but not always) translated both as 'food' or else as 'nutrition' or both, as in 'food and nutrition'. English readers, you may be feeling this is fringe stuff, but it is at the centre of some burning issues. For a start, what follows can be seen as the answer to 'the French paradox'. Here is why.

In English, in practice, 'flour' refers to powder made by the milling of wheat. The term can be used for powder obtained from other grains, as in 'cornflour'. But in its core meaning, flour is white ('refined') or brown ('wholegrain') powder made by milling wheat. (Bran and germ of wheat are not called 'flour', and in Brazil bran and chaff is not called *farinha* but *farelo*).

Now please look at the pictures above, of *farinha* for sale in bulk in Brazilian markets (Belém and Manaus). The examples are made not from wheat, introduced relatively recently to Brazil, which is now grown in the sub-tropical South, but from the indigenous *mandioca* (cassava) which is not a grain but a root. This is not milled. It is grated or ground into all sorts of consistencies, from big or fine flakes, to grit (as in 'grits'), to pinhead (like sand), to meal. It can be pulverised but this is only one of its forms. Cooks use it in all sorts of ways for which there are no common equivalents in countries where the usual form of processed wheat is as powder.

So what? None of this may seem to matter, and nutritionists also point out that wheat even as refined white flour is a good source of some amino acids and retains some vitamins and minerals, whereas cassava is very low in protein and is therefore seen as inferior to wheat (and corn and rice). Such chemical analysis is good business for the global wheat growing, milling and baking trades, whose strategy includes displacing staples like cassava, and with them, traditional food systems and dietary patterns in countries where staples like cassava are indigenous or long established.

But the chemical composition of food is only one aspect of its nourishment. What may be at least as important, is the degree to which the original matrix of the whole food is broken by processing. Specifically, the issue with wheat flour may not be its carbohydrates, proteins, vitamins and minerals, and so on, as much as the fact that it is pulverised. There is more on this in the next item.

To give another example, it may be that although corn in all forms has the same chemical (nutrient) content, its impact on metabolic processes and vulnerability to obesity, diabetes and other facets of the metabolic syndrome, may be less determined by its nutrients, and more by its form, as eaten off the cob, or as whole kernels as canned, or as meal or powder. Thinking of Mexican staple foods, it may be that the effect of tortillas on health and vulnerability to obesity and diabetes is at least to some extent determined by whether they are made from corn coarse ground artisanally and at home, or else from corn milled into powder in large factories.

To circle back to words and their uses and translations, it is surely a mistake to use the term *farinha* to denote powder milled from wheat, and also grated or coarse ground grits, flakes and meal. Cracked and other coarse ground wheat as used in *taboulleh*, which in North Africa is a staple accompaniment to meals, should be classified differently from wheat flour. The point applies to all foods and substances whose chemical (nutrient) composition is similar, but whose consistency, nature, purpose and use is different.

So what is alimentação?

Now for 'nutrition', and the insight gained by contemplation of the term *alimentação*, and similar terms in other Latin languages. This is sometimes translated as 'nutrition', sometimes as 'food', sometimes as 'food and nutrition'. But it does not exactly mean any of these things, in the sense they are used in English. The longer I have worked in Brazil, the clearer it has become to me that the lack of a common word in English that is an exact equivalent of *alimentação,* and equivalents in other Latin languages, is a clue to why industrial food supplies and dietary patterns are a public health disaster.

Here is why. 'Food' refers to edible objects, substances and creations, normally thought to be healthy. But whether healthy or not, 'food' is 'out there', separate from us, on the tree, in the ground, in a shop, on a plate. 'Nutrition' is not an object, it is a process. It is not exterior, but interior, 'in here'. Specifically, it refers to the effect of nutrients as contained in foods, after being consumed and absorbed. The modern science of nutrition is largely derived from knowledge of chemistry, biochemistry, physiology, pathology. It is quasi-medical. The overall point to bear in mind is that 'food' is 'outside', whereas 'nutrition' is 'inside'. What is missing is the act of eating.

But the meaning of *alimentação* is different. The term does not refer just to exterior objects or just to interior processes. It refers to a whole state of which food and nutrition are two parts. It refers to the activities before, during and after eating, meals in particular. It includes a sense of commensality and conviviality. It denotes mental, emotional and spiritual nourishment as well as the narrower biological concept of nutrition. True, in modern Brazil the meaning has now tended to be whittled down to a sort-of rough approximation to the biological term 'nutrition', but it is significant that in professional contexts the term *alimentação e nutrição* is used.

There is an equivalent word to *alimentação* in English. This is the dietetic term 'alimentation', now never used, or at least seen as a relic of pre-scientific days. This explains why nutrition reports and guidelines rarely if ever mention eating or meals, and why industrial food supplies cause disability and disease. As for conviviality and commensality, referring to the pleasures and rewards of all that is involved with and centred on meals enjoyed in company – well, biological scientists might say that this is just soft social stuff, although the mood is changing now, with the growing realisation that environmental aspects of food supply are crucial.

Back to dietetics

Words can give insight. This item ends with food for thought. Much can be learned from pondering *alimentação* and its equivalents in other languages and cultures, and from the ways in which foods are traditionally processed. Much also can be learned from ancient and more recent treatises, textbooks and essays on dietetics, the natural philosophy of the good life well led, of which alimentation is one aspect.

Technology. Processing
Methods and matrices

Access December 2012 Carlos Monteiro et al on The Food System here
Access June 2014 Geoffrey Cannon column on Sigfried Giedion here
Access September 2014 Carlos Monteiro on the food matrix



A steel roller mill used to make wheat flour pulverised into powder (left). A grater used to make flakes of cassava (right). The degree to which food is processed may well shape its effect on health

This continues a theme of the previous item – processing, which is to say, what is done to food before it is consumed. The examples are starchy foods – cereals (grains), roots and tubers – but the point applies to all foods and products. My thanks go to Carlos Monteiro and Anthony Fardet for recent discussions.

Some nutritionists are trained in food technology, and some food scientists are trained in nutrition. But this is unusual. Most nutrition scientists have no special knowledge of the industrial and other processes that alter or transform foods. This is troublesome. Every interested person has a general knowledge of methods of processing that can be done by hand, and anybody who cooks gets to know how foods can be transformed in the making of dishes and meals. But few formally unqualified people know much about industrial processing. Have you seen an industrial extrusion, hydrogenation or hydrolysis machine? No, nor have I, other than in pictures.

Significance of structure

But, and to repeat, it is unlikely that the only or predominant relevant aspect of food and food products as consumed is their nutrient (chemical) composition. The physical nature of the processed food or product, and the extent to which the original food has been transformed by processing, is surely important. Consider the pictures above. The steel roller mill pulverises grains, turning them into fine powder. The structure (matrix) of the grain is destroyed. By contrast, the grater (used by hand and also in industrial versions) makes flakes of roots, tubers (and vegetables and fruits). The matrix of the whole food is broken up, but the pieces remain intact, although affected by various forms of cooking.



Wheat grains, germ and bran (left above); and (below) grades of flour with powder on the right, which is used as an ingredient, and is inedible by itself . Corn grits (picture on the right), are consumed as a food

Another difference between grains, roots and tubers processed in different ways, is how they are used and consumed. This surely is also pretty fundamental. I was brought up in England, a country whose original mixture of grains including oats, barley and rye, were long ago displaced by wheat. So I grew up with wheat flour, used to make breads, biscuits, cakes, pies, and many other products. The wheat berry (top row left above) is eaten in cracked form as *couscous,* and both wheat bran and germ are eaten as a form of supplement with milk or juice and fruit added. But the flour (bottom row) in grades ranging from sand, to its usual form as a fine powder, is inedible except as an ingredient among others which are mixed and then baked, as bread, biscuits, cakes and so on.

The story with grits (from corn on the picture at right), and also various meals (such as from oats) is different. Grits are edible. They are not eaten by themselves, but are made into dishes, or parts of meals, by boiling, toasting and other simple cooking methods, by themselves or as the main part of a mixture with other ingredients. The well-known example in Brazil is *farofa,* made from cassava or corn grits or flakes, toasted with oil, usually also with tasty items like garlic, bacon or herbs. Very delicious too, I just had some with my lunch.

The trouble with powder

The chemical composition of various grains, and of roots and tubers, is roughly similar. They are all commonly grouped as 'starchy staples', with details such as relative content of macro- and micronutrients. But there is more – a lot more – to nourishment than nutrients. Take the extent to which food and products as consumed, retain the original structure or matrix of the original food. The example here of many that could be given, is grits or flakes, in contrast with flour. The hypothesis, is that nourishment from flour in the form of powder (grain stone-ground by windmills or watermills is typically coarser) is likely to be different from and inferior to that from grits and flakes, irrespective of relative chemical composition and also of accompanying ingredients.

This thought can be captured in a snappy phrase like those used by Michael Pollan in his *Food Rules*. Like maybe: 'Avoid products made with powder'.

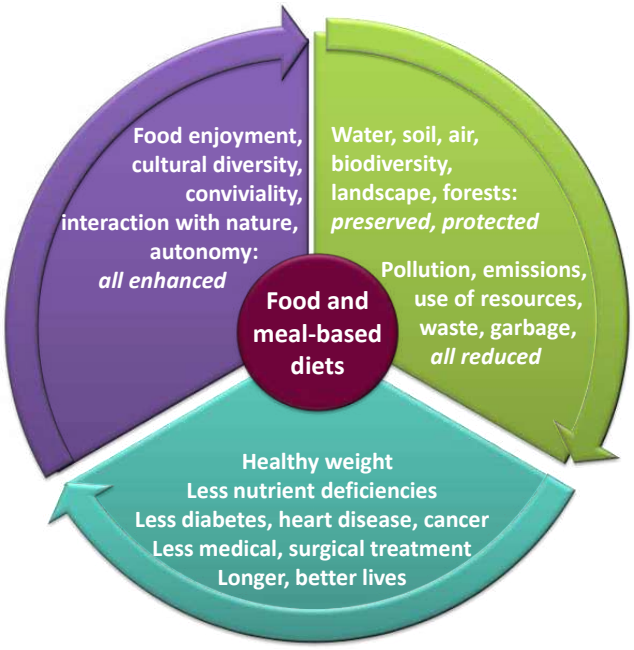


Hot stuff

Nutrition is interesting

Access January 2014 Geoffrey Cannon on Rudolf Virchow here
Access June 2014 Update on Carlos Monteiro at EAT Forum here
Access this issue Geoffrey Cannon and Claus Leitzmann on nutrition principles here

Aims of the Brazilian Food Guide



A diagram can be worth a thousand words, especially when as this one does, it projects some of the multi-dimensional benefits of diets that are based on freshly prepared meals enjoyed in company

'Lets face it' a friend said to me when I was in London recently, 'Nutrition is boring'. Colleagues say so too from time to time, when in gloomy moods. Some even think that nutrition is all about reducing body weight. Yes, there is an issue here. This is wrong. My answer is indicated in the graphic above, a slide projected by *Carlos Monteiro at the May EAT Forum meeting* in Stockholm whose speakers included Bill Clinton. But some people do think that nutrition is boring. Why?

Properly understood, nutrition is all-absorbing. *Jean Anthelme Brillat-Savarin* was right to say 'The fate of nations is determined by what they eat'. Leaders in the profession, some of whom sacrificed highly rewarded careers because of their commitment, should be much better known. In Brazil, *Josué de Castro* is an example.

My contentious thought – hence the *Hot Topic* warning – is that the profession now is selling itself short. So here come a few observations written in respect due to many thousands of dedicated colleagues in the professions of public health and nutrition.

Mediums and messages

Just one of the many issues here, is the ways in which nutrition is framed and expressed. Within this are journals. On presentation, take pictures, and other forms of visual material. For instance, sometimes we are asked why *WN* includes a lot of pictures. The question may be extended, explicitly or tacitly, to why headlines, or captions, or more generally, why the inclusion of journalism. A reason of course is that *WN* is committed to making nutrition interesting, to a wide readership all over the world most of whom are not formally qualified.

But it is not just that. On the purpose of pictures, please look back to those that are part of the previous two items in this column, on words and terms, and on technology. The pictures clarify and amplify the points being made, but they are more than illustrations. It would be going too far to say that the words are illustrating the pictures, but it is clear surely that the proposals made in both items need to show what the text is referring to. Another example is diagrams, like the slides *WN* sometimes uses, such as the one above. The lines of cyclical movement, the colours, and the positioning of the words, project a dynamic concept more effectively than words used as prose or in tabulations. In a real sense, the graphic is the concept.

Making clear that nutrition is interesting is partly a matter of the medium and partly of the message. It needs to be clear that nutrition, as taught and practiced, *is a multi-dimensional public health discipline.* It needs to become clear that the greatest issues confronting humanity now and in the foreseeable future can be successfully addressed when, and only when, nutrition becomes central to all relevant global, international and national public policies and programmes. This is why nutrition science was glamorous in the first period of industrialisation. This is why Nobel prizes were won by nutrition scientists early last century. Unheralded, it still works at this level for the sake of impoverished populations that can be lifted out of misery to autonomy only by a transformation to forms of society that include assurance of food and nutrition security. *This is what Rudolf Virchow declared, i*n 1848.

Such change requires focus on the basic and underlying causes of malnutrition. It is achieved by forms of governance that empower people to rise out of immiseration by policies and actions that include safe sewage systems and water supplies, basic education in particular of girls, employment at a decent minimum wage, an adequately resourced primary health care system – and food supplies that ensure dietary patterns that are nourishing at population, community and family levels. And more. As part of a greater whole, nutrition is of vast importance, and is or should be intensely interesting.

The false god of objectivity

Now, back to the remark made by my friend in London. The worry, I suggest, to put it rather loosely, is that nutrition tends to present itself as if it is boring. As just one tentative contribution to debate, I suggest that the teaching and practice of nutrition is hamstrung by the notion that good science is 'objective'. The notion of 'objective', usually coupled with insistence on being 'factual', is construed to imply elimination of style and tone, in favour of selection, accumulation and recitation of data. Here is an example, from the first page opened of a copy of a journal in my shelves:

> The median of the differences compared to the null value imputation (Q1, Q3) was 84 mg (11,145) for the sample median, and 176 mg (50, 295) for KNN. For energy intake, the median of the differences was about 200 kJ for imputation with retest values and the sample mode, 455 kJ with the sample median and 743 kJ with KNN.

Yes, there is a place for such work. The topic itself is not boring – it concerns the validity of food frequency questionnaires. Nor is there is anything especially wrong: my point is that this is rather typical. The worry is the 'objective' style. The people who do the work are absent from the account, except for authors' credits. Singular personal pronouns are not used; 'we' is sometimes used, of the authors as a group. The past passive tense is almost always used, as in 'the finding was that…' 'Methods' and 'discussion' sections swarm with numbers, often used over-precisely. And so on.

As a contribution to a needed debate, I suggest that one way to show that nutrition is interesting and important, is a shift in its presentation in journals, such that the practitioners of nutrition are obviously present in, responsible, and accountable for their work. Like economics, mathematics and statistics are means to ends. Public health and nutrition are human activities.

Status

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