We hear that by 2050 most British adults will be obese. Is this so, and if so, so what? This column includes a report on beneficence from the sugar industry, a riff on the geopolitics of sandwiches, and a suggestion for a rallying call. Productive New Year!

Galloping extrapolitis

Official bodies are upping the ante on obesity. Remember the scene in the movie Crocodile Dundee where our hero scoffs at the switchblade of a would-be mugger and whips out his massive weapon saying ‘Call that a knife? That’s a knife? In 2004 a UK Commons Committee estimated the then national cost of obesity at around £3.5 billion a year. Now the UK government’s advisory Foresight group, with the air of a poker player pushing a suitcase of chips into the middle of the table, leaning back and saying ‘double, and triple double’, has come up with a projected £45.5 billion for 2050. That’s a statistic.

Commenting, Philip James, mastermind of the IOTF, has been at his most sepulchral: ‘We are facing a far worse scenario than our gloomiest predictions’, he says. Tut tut: IOTF stalwarts have for the last decade been constructing ever more apocalyptic extrapolations, and have helped to guide the Foresight analysis and the media response. Yes, weight gain is out of control all over the world now, though anybody who suggests that obesity is a problem is immediately branded as a crackpot. True, very obese people are more likely to be out of work and thus a drag on social security, but this will only have the opposite effect. Clothes manufacturers will bask in built-in obsolescence. Makers of airline and public transport seats will be in a well-upholstered job for life. Visions of a tape-measure in every school lunch-box will boost the hoi polloi who get into mischief and spend their tax-payers’ expense. True, very obese people are more likely to be out of work and thus a drag on social security, but this will only be a big deal in a full-employment economy. Besides, unemployed zeppelin helots browsing on junk, watching television and playing computer games are cheaper than muscular boi polloi who get into mischief and spend much of their lives working out in the slammer at the tax-payers’ expense.

Obesity is fuelling national ‘development’ all over the world: ‘developed’ countries are those that turn over most money; ‘developing’ countries are those that spend the most money on obesity drugs in 2025 will exceed the turnover of most companies. Every marina will feature a bariatric surgeon’s yacht. Burger and pharmacy high street chains will boom and synergistically merge. As my own contribution to the extrapolation craze, I predict that sales of the top five foods are pathogenic. By their nature, cut-offs like BMI 25 are arbitrary, and yes, rapid weight gain in children and Asians evidently does now increase the risk of diabetes almost irrespective of BMI. But this does not mean that all adults should be at or shrink to a BMI well below 25 (short of 18.5). One, this won’t happen. Two, if taken seriously it would drive even more people to worse than useless dieting regimes, and to drugs and surgery. Three, yes it’s crucial that children are breastfed and grow up active and slim. Four, the issue is surely not body mass but the nature of the foods and drinks being consumed.

Where is the evidence that adults living in parts of the world where food supplies have been secure for a few generations, are at much extra risk of any disease at BMIs of say 23–24? If the evidence is there fine, but let’s see it. This needs debate.

Obesity: ching, ching

My challenge is on the £45.5 billion conjuration, which if the UK is taken to be sort-of average, could become a global 2050 abracadabra of $US 10 trillion. Now that’s a statistic we are talking the current US annual national debt here.

Suppose such extrapolations turn out to be accurate. Are they devised in order to make politicians shiver in their shoes and change their ways? They will have the opposite effect. Clothes manufacturers will bask in built-in obsolescence. Makers of airline and public transport seats will be in a well-upholstered job for life. Visions of a tape-measure in every school lunch-box will boost the shares of haberdashery accessory manufacturing companies. Every marina will feature a bariatric surgeon’s yacht. Burger and pharmacy high street chains will boom and synergistically merge. As my own contribution to the extrapolation craze, I predict that sales of the top five obesity drugs in 2025 will exceed the turnover of most small sub-Saharan countries. Fatness is great business, which means happy governments.

Obesity is fuelling national ‘development’ all over the world: ‘developed’ countries are those that turn over most cash. That’s what ‘development’ means. In the UK Health Secretary Alan Johnson has been rising in the House of Commons, saying that obesity really is appalling and
something must be done. Meanwhile I see Chancellor of
the Exchequer Alistair Darling licking his lips. The fatter a
population, the better developed the country. Ching,
ching! Or am I missing something? If my economics are
wonky, please put me right, in the letters column.

**Sweetness and might**

A game for academics when gathered together for mer-
riment and diversion is to invent amusing combinations
of endowed professorship and discipline. Some possibili-
ties involve black humour. Thus ‘The Rupert Murdoch
Chair of Media Independence’ or ‘The al-Saud Chair of
Shoah Studies’ or ‘The Halliburton Chair of Iraqi Child
Health’ or ‘The Altria Chair of Tobacco and Well-Being’. In
our field one favourite is ‘The Tate & Lyle Chair of Human
Nutrition’.

Lo, this now exists! King's College London has
announced this £4.5 million endowment; the closing date
is in a few days as I write. The job specification explains
that the successful candidate will be undertaking research
on obesity, diabetes, the metabolic syndrome and the
effects of carbohydrates on gut health(5).

The issue here is not the benefaction. Few people
have a problem with the original source of money for
London's Tate Gallery, because there is no direct conflict
of interest. The issue is the conflict. Is sucrose relevant
to weight gain, diabetes, gut health and the metabolic
syndrome? Sure. Does the sugar industry want to erase
sucrose as an evident cause of diseases, even of dental
caries? You bet. Does this affect the standing of research
done by a department of nutrition endowed by Tate &
Lyle? Yes.

To apply the tests used in law, would a reasonable
person, knowing the source of funding for this chair and
the job-spec, believe that consequent research findings
would be unbiased? Suppose the KCL Tate & Lyle pro-
fessor's team found some tasty biological pathways indic-
ing that sucrose as contained in soft drinks was just as
likely as high fructose corn syrups to cause deranged gut
microbial ecology, or weight gain, obesity *et seq.*, would
reasonably knowledgeable people expect to see this as
the headline news in the paper as finally prepared for
publication? In my opinion no, they would not.

What seems more likely is a general eyebrow-raising
and tooth-sucking, not only about such work, but also I
am sorry to say, about the nutrition division of King's
College London. Word gets around.

Maybe I am wrong. Maybe journal editors feel no need
to mention professorial endowments in lists of authors or
declarations of funding and competing interests, so
everybody would forget. Maybe the sugar industry has
endowed professorial chairs all over the world, in which
case apologies for singling out KCL. Maybe it’s only
rancid food activists who think there is any issue here.
What do you think?

**Declarations of what?**

Just exactly what is a competing interest, and what use are
the declarations that appear at the end of papers in
academic journals? Let's take some fictitious examples.
This isn't just about sugar. Never mind about sugar, think
general.

Researchers, in their publications, should declare the
source of their funding and support for specific projects.
If you get material support from Big Beast Pharmaceut-
ticals in your quest to discover whether serum levels of
vitamin 666 in tiny tots rise after administration of 666
pills or shots supplied by Beast, you are expected to say
so. You certainly should say if Beast commissioned the
study.

Absolutely you should say if Beast staff guided the
protocol of the study or its write-up and conclusions. But
here's a problem. Beast won't mind you giving thanks for
the gear. But Beast will not want you to say 'thank you,
Beast, for controlling "my" study written up by your
people, with me as Beast stooge' – and nor will you. The
implication is that declarations are liable to be only of
relatively trivial competing interests.

Also, why should declarations be confined to support
of the specific published study? Take an imaginary
investigator who works in the department of Gob-
bbleomics, within the division of GenTech, within TRI (the
Translucency Research Institute). Should the declaration
in published papers list the researcher's boss, Dr Ivor
Billion the Leviathan Globalobomics Inc. professor, who
secured more Leviathan money for the project? Should it
list members of the TRI Board of Regents who (according
to the annual report or as Googled) are heavy-hitting
biotech industry executives? Should the researcher ask
Prof Billion for a list of all Globalobomics funding and
Gobbleomics competing interests relevant to the subject
of research?

This would not happen. The researcher would get the
heave-ho, for a start. But this is all relevant to the study
and its conclusions. Again, I say that conflict declarations
are likely to be no more than acknowledgement of weed
on the surface of a deep dark pool.

**Not by bread alone**

Like money, nutrition is valuable in itself and also in what
it represents. Both touch much of life. Here is a riff on
bread. When I lived in England and before I started to
learn about nutrition and food policy, I assumed that
bread was a universal staple food, as attested in Christian
Biblical phrases like 'man shall not live by bread alone'
and 'give us this day our daily bread', and indeed by the
miracle of the loaves and fishes and the Last Supper(6).
I thought that bread made from wheat was the universal
staple, and that bread made from rye and other grains was
exotic delicatessen.
What ignorance. Walter Yellowlees, who celebrated his 90th birthday this year, has sharp things to say about the replacement of whole oat porridge with refined wheat bread, and the impact on the health of the Scots, from many years of experience and reflection from his work as a general practitioner in Aberfeldy(77). Not so very long ago the cereal base of Britain was oats, rye and barley, as well as wheat. The dominance of wheat is a function of mechanisation; refined wheat flour is ideal substrate for mass-produced sliced white bread, whose ‘offals’ – the bran and germ – become animal feed or ‘health’ food. The food culture of Britain has been wrecked.

In most of the world, bread has not been eaten. The staple starchy food in much of Asia is rice, and in many other parts of the world are roots or tubers. In much of Africa the staples are types of porridge. Unless mixed with wheat flour, corn bread is like cake, and it’s a stretch to say that tortillas are a type of bread. Wheat and bread have become universal foods as a result of the economic globalisation of food systems, more to do with the clout of Cargill and General Mills than the preferences of customers and consumers(80).

Is bread such a good food? The public health nutrition convention since the 1960s has been to recommend less fat, saturated fat, sugar and salt, and more ‘complex carbohydrates’, meaning more of any starchy food. When expert reports designed to prevent chronic diseases are translated into plain language dietary guidelines, in most countries including those where wheat is not a natural crop, bread features prominently.

The usual line, laid down in the 1950s by Robert McCance and Elsie Widdowson(9), is that while the whole grain contains more nutrients, in terms of public health there is no real difference between white and wholegrain bread. This opinion was reinforced as from 1981 in the UK as a result of a government advisory COMA report(10) stating that all sorts of bread are healthy. (One member of the committee, the redoubtable Jerry Morris, recorded his reservations, saying that wholegrain bread is preferable.)

**Our daily sarnie**

It is bad science and bad public health to make little distinction between wholegrain and white bread. The first well-known argument against the refined flour from which white bread and innumerable processed foods are made, is that it is depleted not only of dietary fibre but also of essential fats, vitamins and minerals. This is all the more important now that average energy balance of basically sedentary populations is unnaturally low and continuing to drop. Active people whose PAL is say 1·70–1·80 may have room for some degraded food. People whose PAL is say 1·40–1·50 do not.

The second well-known argument is that *Homo sedentarius* does indeed not live by bread alone, or bread used as a trencher, but bread used as an envelope for fatty, sugary or salty fillings. Nobody eats white bread by itself. Ugh! The energy content of many ready-to-eat sandwiches is awesome. Look at their labels: one double sandwich may weigh in at around 500 calories, or around 30% of the energy requirement of an average size sedentary woman. Burgers are quite a lot less energy-dense than a sandwich spread with margarine plus a fatty filling plus a dollop of mayonnaise.

Bread itself packs a fair old calorific wallop. The new big report on food, nutrition, physical activity and the prevention of cancer(11) suggests that foods begin to be energy-dense at around 225–275 calories per 100 grams. Most bread is very close to this range or within it, and once toasted is at the top of the range.

Weight for weight, bread is more energy-dense than most lean meat, and than ice-cream, avocados and fat chips. Boiled rice is around 140 calories per 100 grams, roast potatoes 150, and the porridge that bred the brawny Highlanders is 50 calories per 100 grams made with water, 120 if made with whole milk. So I agree with Walter Willett:(12) in any ‘food pyramid’ white bread does not belong in the staple foods ‘eat more’ bottom layer, but in the junk foods ‘don’t touch the stuff’ top layer.

**The Bolivarian diet**

There is another reason why not bread, to which I am sensitised because of living in Brazil. Wheat is not a natural crop in tropical countries, and there is no bread-making tradition in Brazil. Shops sell limp, fluffy and sweetened versions of what’s on sale in the USA. Ugh.

Here comes a political bit. One of the themes of the learned book on Hugo Chávez by Richard Gott(13) is land reform, meaning the right of the people who work the land to own it. Che Guevara when Cuban minister of industry tried to wean Cuba off reliance on sugar(14) in favour of mixed crops, to feed the farmers and the nation. Likewise the Venezuelan national plan for agricultural self-sufficiency and self-reliance includes replacement of products made from wheat imported from the USA, whose heavily subsidised price ruins local farmers, and the identification of rice and corn as the national staple crops. One reason why Hugo Chávez is demonised in the media now dominated by the richest countries, is that he is resisting economic colonialisation.

Most Latin Americans I know see ‘free markets’ as enforced by the USA and European countries, that are themselves ruthlessly protectionist, as a ruse, a repeat of the looting of Asia and Africa by the European imperial powers. There is also a public health nutrition aspect to what Hugo Chávez is doing in the name of national self-sufficiency. Traditional dishes made from rice and corn are not energy-dense. If citizens of the Bolivarian Republic of Venezuela are encouraged to celebrate and consume corn rather than burgers, and rice rather than
bread, they will become more independent, and also more likely to stay in good shape.

**Dietetics: toot, toot**

Public health nutrition professionals may make a difference for the better if we raise our game. We can start with a campaign to revive the original meaning of ‘diet’ which as you’ll know is ‘way of life’ or ‘way of being’.

This ancient concept as taught by the Greek, Roman and Arab masters gradually narrowed, but for almost all the second millennium CE it included a consideration of all what used to be termed the ‘non-naturals (air, aliment, exercise and rest, the passions and affections of the mind, wakefulness and sleep, repletion and evacuation)’\(^{(15)}\).

In the 19th century the sense of the term narrowed still further, as a result of the aggrandisement of drug-based medicine; this made ‘scientific’ dietetics a rump discipline concerned with the role of foods and drinks in disease and health. Later, health tended to disappear. Later yet, dietitians tended to become medical ancillaries, trained as specialists in therapeutic diets believed by physicians to be suitable treatment for various diseases.

Inspiration for our campaign is found in the verses of Emperor Claudius: ‘Great harms have grown, and maladies exceeding./By keeping in a little blast of wind./So Cramps and Dropsies, Colics have their breeding,/And Mazed Brains for want of vent behind’. If you agree, toot.

**General dietetic advice from the School of Salerno**

includes to rise early and: ‘Three things preserve the sight: exercise and rest, the passions and affections of the mind, and Arab masters gradually narrowed, but for almost all the second millennium CE it included a consideration of all what used to be termed the ‘non-naturals (air, aliment, exercise and rest, the passions and affections of the mind, wakefulness and sleep, repletion and evacuation)’\(^{(15)}\).

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