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Barbecue of the Vanities

Steven Shapin

- *Eating Right in the Renaissance* by Ken Albala
- *Food Politics: How the Food Industry Influences Nutrition and Health* by Marion Nestle

I am thinking of making Tuscan bean soup for dinner tonight. (My wife is from Birmingham and prefers her beans with sausage, egg and chips, but I have my limits.) If this were an ordinary day, I'd just get on with making the soup. I've got the things I need: the beans, pancetta, garlic, olive oil, parsley and chicken stock. I've made it dozens of times, and, after I've decided that this is what I want to eat, I don't usually think any more about it. But today I'm writing about the history and current politics of what and how we eat, so I thought I'd look at the panel of Nutrition Facts that appears on the label of practically any packaged food you can now buy in America – something I can't recall doing before, or at least not with much attention. In the States these labels were mandated by the Nutrition Labelling and Education Act of 1990, and in Britain a similar sort of thing – though with significant category differences – is administered by the Food Standards Agency, established in 2000. According to the US Food and Drug Administration (FDA), these labels are meant to be 'helpful for people who are concerned about eating foods that may help keep them healthier longer'. I'm all for that.

The label on the tin of cannellini beans tells me that there's no fat (saturated or unsaturated) in it and no cholesterol. That's nice, I think. Like everyone else, I've heard that eating a lot of fat puts pounds on you, and that being overweight is bad for your health and longevity. Similarly, you'd have to be living on Pluto to miss the expert salvos against dietary cholesterol, though the pancetta will probably do some damage here. The label also says that a serving of

about 130g of beans will give you 22 per cent of your recommended daily dose of dietary fibre. That's good, too: I remember reading about the virtues of fibre in warding off colon cancer, though I think there are two sorts of fibre – soluble and insoluble – and I'm a bit shaky about which sort is supposed to be good for preventing what disease. However, I also seem to recall reading in the papers a while ago that claims about the cancer-preventing virtues of fibre had been exploded, and I have an epidemiologist friend who maintains – if I understand him correctly – that you basically play with the cards dealt you by your genes and in utero development, so you might as well eat whatever you like. Then again, my own GP told me to eat fibre and lay off animal fat, and another doctor handed me a jar of herbal supplements, the name and purpose of which I now forget.

So far as the dietary experts are concerned, I'm not too sure what they now coherently say about the virtues and vices of Tuscan bean soup, though I know that they have a lot to say on all sorts of subjects and that they are very upset with people like me for not listening in the way I should. Quite frankly, I'd prefer not to think about the counsel of expertise in these matters, although that's scarcely an option these days: dietary expertise is now inevitably a guest at the dinner table, invited or not. I suppose that in these respects I'm typical of people of my sort – age, sex, nationality, income-level and education. Sometimes I notice and care about dietary expertise and sometimes I don't; sometimes I've got other things on my mind and other priorities; sometimes I know what expertise says and sometimes I haven't a clue. It seems to speak with many voices these days, and I can't usually be bothered to sort out real from so-called junk science, even if I could. I'd say I was full of contradictions about such matters – I take some of the fat off the pancetta but I feel a bit feeble doing it – if I thought about what I eat systematically enough to *have* contradictions. Like most people of my condition, I encounter expertise in different ways: sometimes friends tell me what the latest scoop is; sometimes I read about it in the papers; sometimes I hear about it from official pronouncements, governmental and professional; sometimes – and this tends to work on me – I encounter expertise face-to-face in a doctor's surgery when I'm feeling more vulnerable than usual.

Neither the cacophony of expertise nor the incoherence of lay responses is new. The first European dietary books began appearing in the late 15th century. They were, Ken Albala shows, relatively respectful of existing patterns of consumption: not surprisingly, as they tended to be written for a courtly readership by deferential court physicians. It was well understood that the business of government involved banquets and drinking, and that a prince who was fussy about what he would or would not eat could scarcely do a prince's business. As James I instructed his son, 'your dyet should bee accommodatte to your affaires, & not your affaires to your diet.' The job of the dietary writer was, therefore, to work within these conventions, fine-tuning them to ensure that courtiers, and those who aspired to that condition, could take into account empirical medical findings about what tended to be good or bad for individuals of different constitutions. So Giovanni Michele Savonarola – the grandfather of the Florentine killjoy – counselled the rulers of Ferrara that 'Hare is not a meat for Lords,' that 'Fava beans are a food for peasants,' and that, while beef was a food fitted for artisans with robust stomachs and coarse constitutions, the prince might eat it if 'corrected' by the right condiments. (Swans were then reserved for the Dons: like peacocks, pheasants, sturgeons and porpoises, they were meat for courtiers and aristocrats.) In general, however, the advice was *quod sapit nutrit* – if it tastes good, it's probably good for you – and readers were understood instinctively and by habit to do right by their stomachs: 'every man in his humour'; 'you should eat what you are'; 'chacun à son goût'.

Galenic medical theory offered expert explanations of the counsels of proverbial common sense and custom. It was best to eat what was constitutionally similar to you, and when the balance of qualities in your food (warm, cold, dry and moist) matched those of your own temperament (sanguinary, choleric, phlegmatic or melancholic), then you rightly and naturally relished it. Your tongue and its taste buds were, after all, formed out of the same stuff as the rest of your body. The extension of this way of thinking to the eating of human flesh fascinated early dietary writers, because cannibalism was as morally wrong as anything could be and as physiologically natural as it was possible to imagine. St Jerome was said to have been shocked to

witness the Scots enjoying a meal of swineherd buttock and maiden's breast, and a late 16th-century writer noted that cannibals accounted human flesh 'the sweetest meat of all others', but dietary writers wouldn't approve anything closer to human flesh than pork, human blood 'taken from a clean, happy and temperate adolescent', or the milk of a healthy young woman of 'tempered complexion'. This last food was advertised as a favourite of the elderly John Caius of Cambridge, who offered vivid proof that you are who you eat: Caius was made 'so peevish and so full of frets when he suckt one woman froward of condition and of bad diet; and contrariwise so quiet and well, when he suckt another of contrary disposition'.

By the 1530s, expert dietary advice had become more aggressive and less complaisant to courtly custom and genteel convention. The audience for these sorts of book had expanded and changed, and they were increasingly geared to the concerns and lifestyles of the scholarly classes whose sequestered *vita contemplativa* could accommodate a more embracing care of the bodily self and whose self-presentation traditionally worked in elements of secular hypochondria or sacred asceticism. The tone became more hectoring; blanket prohibitions took the place of qualified advice; custom was generally subsumed into the category of 'popular error'; and what pleased your palate was no longer taken as a reliable guide to what secured your health and long life. Courtly extravagance and gourmandise now stood condemned, as it were from the outside: not just because they were morally bad but because they were bad for you. By the time of Dr Savonarola's more famous grandson, the physicians were throwing dietary delicacies onto bonfires already well-stoked with the moral and literary vanities. Alcala tries neatly to periodise tendencies in dietary writings: in his first period (1470-1530), the doctors' presumption was that you were basically healthy, occasionally needing medical expertise to maintain you in that state of health, but by the second period (1530-70) the experts were trying to convince their readers that they were basically ill, requiring constant dietetic monitoring to prevent sickness from becoming disabling or even fatal. In 1650, Humphrey Brooke wrote that 'a Healthful man is hardly to be found, everyone having his constitution more or less depraved.'

The state had a legitimate concern with the health and longevity of its rulers, and medical expertise offered an idiom in which the Court could be simultaneously lectured on its moral as well as physiological duties. Banquets were bad for you, and, in general, the consumption at one meal of that variety of foods so loved by courtly gourmands was a recipe for medical disaster. Different foods required different times of concoction. So, for example, fish will corrupt in your stomach before red meat is completely concocted, thus stirring up a noxious stew, releasing foul vapours and unbalancing the system. If you would be well, Thomas Elyot wrote in 1541, renounce that 'continual gourmandise, and dayly fedinge on sundry meates, at one meale'. The ancients ate a simple and frugal diet and it was well attested that they lived hundreds of years. Even now, it was said, their spare diet was the reason peasants lived longer and more healthily than those cursed with wealth and abundance. By the late 16th century, medical expertise tended towards consensus on one point: good health and longevity were to be secured by eating simply and eating less, though few went so far as the Venetian gentleman Luigi Cornaro, his countryman, the mechanical physician Santorio Santorio, or the Flemish Jesuit Leonard Lessius, in specifying the precise quantity of aliment requisite to maintain the human frame. Cornaro annoyingly lived to 100 on just 12 ounces of food a day, continually producing new 'I-told-you-so' editions of his *Della vita sobria* as he bloomed with geriatric good health, becoming one of the world's first heroes of secular abstinence.

If there was expert agreement on the general virtue of temperance, consensus ended there. Some writers commended fish while many others warned that it was a phlegmatic food, tending towards corruption. Advocating vegetarianism was rare, but writers battled over whether meat-eating was actually good for you, and, if so, what meats best promoted health. Some followed St Paul in approving 'a little wine for thy stomach's sake', as an aid to digestion and for the making of good blood; others condemned it because it slowed digestion, drying and toughening food in the stomach. Notoriously windy foods, like beans, gave audible and olfactory proof of imperfect concoction, but might be recommended as a primitive version of Viagra: the gases diffuse through the body, expanding the peripheral

blood vessels and ‘keeping the rod erect’, according to Antonio Gazzo’s *Corona florida medicinae*. Many writers regarded fresh fruit, particularly peaches, cucumbers and melons, as so viscous and difficult to concoct that they were practically lethal – both Albert II of Bohemia and Pope Paul II were struck down by eating melons – while Girolamo Cardano’s *De usu ciborum* identified the ‘abstersive’, or scouring, virtues of melons, and Prosper Calano reckoned that melons might be safely taken when corrected with a little ‘plaisantin cheese’, a forerunner of the modern Parmesan.

In Albala’s third period (1570-1650), dietary writers became more eclectic and empirical, throwing off the shackles of ancient authority and learning from experience. Prohibitions against melons, for example, were harder to sustain as more people ate them – even ‘uncorrected’ by parmigiano reggiano – and did not immediately fall down dead. (When Pepys received a gift of Portuguese musk-melons from Lord Montagu in 1661, he ate them immediately, never entertaining the thought that his patron might be trying to kill him.) But the tone of expertise was as bullying as ever, and, far from presuming that what tasted good was good for you, the experts now increasingly tried to convince you that you could secure health only through a continual battle against appetite. Since the body was in constant need of correction, the food that was best for you was probably the stuff that gave least pleasure. Puritanism was finding a powerful ally among the physicians. Yet by the later part of the 17th century, Albala remarkably announces, ‘the entire dietary business gradually became defunct’, a victim of ‘the scientific method’. True, newly fashionable Newtonian and Cartesian micro-mechanical theories began the very slow process of squeezing out the old language of virtues, humours, complexions and temperaments, but into the 18th century, and far beyond, physicians’ dietary counsel often remained as bizarre, confident and, above all, heterogeneous as ever it had been.

In the Renaissance and the early modern period expertise spoke with so many voices that it is impossible to assess whether or not it had any effect on lay practice. If Doctor X warned against fish and Doctor Y said that a nice piece of trout was just what you needed, you might

have some personal reason to prefer one expert to another. Or their recommendations might cancel themselves out in your mind, the variability of advice offering a sign that there was no genuine expertise in this area. Albala struggles to identify some causative influence from the decrees of expertise to lay practice but, in the end, isn't certain he can find one. Such was the heterogeneity of 'warring camps', he concedes, that people probably 'stopped listening'. Certainly, by the 1580s Montaigne had had enough. He'd read the dietary books, and that was the problem; he'd read practically all of them, books by the pro-fish experts and the anti-fish experts: 'If your Physitian thinke it not good that you sleepe, that you drinke wine, or eate such and such meates: Care not you for that; I will finde you another that shall not be of his opinion.'

Much has changed since the Renaissance in the provision and institutional location of dietary expertise. First, its official locus has become significantly detached from the medical profession: you can now be a nutrition scientist without being a physician and a physician without knowing or caring much about the relation between people's diet and their overall states of health and disease. Second, dietetics has become a major state concern. Nutritional advice now often speaks with the authority of the state and frequently with the force of law. The Pythagorean community is said to have banned beans and meat, and Plato had quite definite ideas about how the different classes in the Republic ought to be nourished – the Guardians were supposed to go easy on the 'sweetmeats' and the 'Attic pastry' – but the only secular modern state that has seriously gone about the business of dietary control in the name of medical expertise is Nazi Germany, where Party nutritionists attacked the excessive consumption of meats, fats and sweets in favour of a 'more natural' grain, vegetable and fruit-based diet, and where the Führer himself set a vegetarian example. 'Nutrition is not a private matter,' a Hitler Youth manual put it, and Germans have 'a duty to be healthy' (see Robert Proctor's fine account of Nazi dietetics in *The Nazi War on Cancer*, 1999).

Third, a major player in the constitution of modern dietetic expertise is big business. 'Big Food' has its own nutritional experts; it massively

funds the supposedly independent research of academic nutritionists; and this conflict of expertise is played out in battles over the content of the state's advice and how the state regulates what companies can and cannot say about their products. Marion Nestle embodies most of these changes. She speaks from the platforms of official expertise: she's a professor of 'nutrition and food studies' at New York University (having taken a PhD in molecular biology) and a provider of expert advice to nutrition advisory committees of the Federal Government. And the major object of her wrath is the American food industry, whose single-minded pursuit of profit has, in her view, effectively prevented the voice of authentic expertise from being enshrined in official advice and law.

Big Food is very big business indeed. In the US the biggest company is Nestlé (no evident relation to the author), whose annual food sales are more than \$35 billion and whose advertising budget is more than half a billion dollars. Nevertheless, the industry has a fundamental problem which both its advertising campaigns and contributions to politicians are meant to address. In a society where under-nutrition is at historically low levels, it is an industry with naturally low growth rates. There's just so much food you can eat. Profit margins on unprocessed foods – raw fruits and vegetables, for example – are slim, but enormous value can be added in processing, packaging and branding: the cost of the maize in a packet of cornflakes is a trivial percentage of its retail price. Moreover, profits are highly sensitive to any decrease in consumption of particular products: in such an obsessively health-conscious society as the United States, official advice to eat less of some kind of food is extremely bad news for the corporate balance-sheet and must be aggressively countered, while expert suggestions that it might be good for you to eat more of a product can cause an overnight explosion in a company's share price.

Some of Nestle's shocking revelations about the behaviour of Big Food will shock only those who are easily shocked; others will be welcomed less as news than as occasions for those so inclined to make public displays of moral outrage. So, for example, Nestle vouchsafes the fact that 'the primary mission of food companies' is not to improve people's health but to 'sell products'. The companies

put their products in the best possible light; they advertise aggressively and they target impressionable audiences, including children; they lobby politicians to secure a favourable regulatory environment. That doesn't make Big Food unique: Nestle pushes the provocative analogy with Big Tobacco, but in these respects the food industry is little different from, say, the athletic shoe industry.

Other revelations have more bite. One is the issue of 'pouring rights': soft-drinks companies make significant contributions to American school budgets on condition that their products monopolise the omnipresent dispensing machines and that their logos are prominently displayed on school premises. Hard-pressed school budgets are swiftly becoming addicted to these sources of funding, and student bodies are being turned into soft-drinks cheering sections. In one well-publicised incident in Georgia a pupil was suspended from school for wearing a Pepsi logo to a 'Coke Day' rally. Another meaty bit of news is the weight of money descending on nutrition professionals from the food industry, making scientific independence and integrity as hard to locate there as they are in the better-known relationship between the pharmaceutical industry and biomedical researchers. Some superficially independent nutritional organisations have been substantially captured by Big Food, and, while Nestle believes that resulting scientific bias can be demonstrated, she worries even more about the perception that Big Food can co-opt and compromise expertise whenever it wants, with the result that there will be no unmistakable signs by which the public will be able to distinguish genuine expertise from ideology and advertising.

The food industry can also evidently purchase the legislation it wants. Food companies are large and effective donors to politicians' campaign funds. Time and again, they have used that influence to set one Federal regulatory agency against another and, especially, to beat down the more stringent measures favoured by the FDA. When, in 1977, a Senate committee report recommended that Americans reduce their consumption of red meat, the National Cattlemen's Beef Association erupted, obtaining additional hearings to revise the offensive report. Senator Robert Dole attempted to mollify the beef

producers. Would it help, Dole asked, if we struck out words that suggested reduction and said ‘increase consumption of lean meat’? The Cattlemen’s President was insistent: ‘Decrease is a bad word, Senator.’ The committee revised the report. Similarly, the 1990 Labelling Act that produced the dietary information on my can of beans was the result of a titanic (and costly) struggle in which Big Food successfully secured the right – against FDA wishes – to make health claims for foods and supplements when supported by the vague criterion of ‘significant scientific agreement among qualified experts’. That political influence is a major reason American food packaging now carries health claims which are not so much untrue in themselves as irrelevant to the overall role of the product in an individual’s state of health: sugar-saturated bottles of ketchup advertised as containing a single ingredient that ‘may help reduce the risk of prostate and cervical cancer’; processed cheese slices promoted as low in fat; Kellogg’s Frosted Flakes and Fruity Marshmallow Krispies sold as ‘heart healthy’ (with the imprimatur of the American Heart Association). Here, as elsewhere in modern American politics, money buys access and access translates into influence. Early in 1996 Vice-President Gore announced a plan to tax Florida sugar growers to pay for the pollution they caused in the Everglades. Soon afterwards President Clinton broke off deep policy discussions with Monica Lewinsky to take an angry phone call from a major sugar grower. Gore’s proposed tax did not happen. As a *Time* magazine report concluded, ‘that’s access.’

Against the mercenary interests of Big Food, Nestle means to offer the findings and counsels of authentic dietary expertise. She’s confident about that expertise: it has, she says, been stable and coherent for at least fifty years and it is currently enshrined in the US Department of Agriculture’s Eating Right Pyramid, which was designed as a graphically gripping way of persuading the American public to construct their daily diet out of descending numbers of servings of breads, grains and pasta; fruits and vegetables; dairy products and animal flesh; fats and sweets. There is, according to Nestle, ‘almost universal consensus’ about the virtues of that expert advice.

Like the dietary writers of the Renaissance, present-day nutritional experts convince themselves that their enterprise is consequential. So Nestle flatters herself and her profession with the finding that two-thirds of American adults now say that they've 'heard of' the 'food pyramid' – though no statistics are given about what they think its advice is – but whatever reassurance this may give nutritionists is diminished by the fact that the diet of only 1 per cent of American children resembles its counsels: childhood obesity and childhood incidence of Type-II 'adult onset' diabetes are now at alarming levels. So why does the American diet remains so appalling despite the supposed coherence and stability of expertise? There are several possible explanations, but the only one that Nestle seriously canvasses is the distorting effect of Big Food's advertising, politicking and co-opting of real nutritional science. Nestlé, the company, has a lot more money than Professor Nestle the nutritionist, and so the company can get its health claims more densely and more effectively before the public. But that's almost certainly too simple. There is much less consensus in organised nutritional expertise than Nestle makes out. The American Council on Science and Health, for example, panned her book, calling her an alarmist and a 'national nutrition-nanny'; right-wing think-tanks dispute matters of scientific fact even as they point accusing fingers at the 'Food Taliban' and link the debates over Government dietetic advice to fundamental issues of individual liberty v. state responsibility; and in the 1977 controversy over beef-eating, the American Medical Association expressed scepticism about the value of the Government giving undifferentiated advice to an entire population, while the American Heart Association thought it a thoroughly good idea. You can only say that there is 'almost universal consensus' if, as Nestle tends to do, you impugn the integrity and competence of those who happen to disagree with you in this complex and, some would say, inherently uncertain area – an uncertainty which is that much greater when expertise is addressed not to a population but to a unique individual, with that individual's specific hereditary disposition, condition, habitual way of life and other interests. But when dietary expertise at any level is divided, it is asking a lot of lay people to judge among the experts, and, in that respect, too, nothing has changed since the Renaissance.

Moreover, certain strands of modern expertise have surely made a tactical mistake in abandoning the language in which common sense and prudence have been embedded for millennia: balance, variety and moderation; have a little bit of everything; the occasional indiscretion isn't going to kill you, but don't make a habit of it. Because expert nutritionists like Nestle want so much to expose the evils of the Big Mac, Coke and roast beef with Yorkshire pud, they have in effect allowed the language of prudential common sense to be hijacked by the food industry. So Coca-Cola gets to say that soft drinks 'can be part of a balanced diet' and the Cattlemen's Association to say that eating beef is in line with advice to use 'balance, variety and moderation of all foods'. The good professor is left steaming at the mercenary self-servingness of it all, but can bring herself to say neither that steak and chips every now and then is going to give you a heart attack nor that 'balance, variety and moderation' is in itself bad advice. When it comes to everyday eating and drinking, expertise that strips itself of the rhetoric and sentiments of common sense has probably rendered itself impotent.

Preachers of virtue tend traditionally to be less interested in why people sin than in describing and condemning sin, and that is perhaps why Nestle's book is so convincing in documenting the misdeeds of the food industry and so utterly unconvincing in attempting to explain why people eat as they do. The proverbial voice says, 'You are what you eat,' or, more resonantly in German, 'Man ist was er isst.' Nestle and the modern nutritionists construe that dictum almost solely in molecular terms – if you eat too much animal fat it will clog up your arteries – but the relationship between eating and identity is moral as well as molecular. People eat what, when, how, how much and with whom they do for a thousand reasons apart from the desire to assuage hunger and to secure a healthy long life: to show love and power; to express amiability or contempt; to display willingness or unwillingness to be part of your society; to demonstrate sophisticated worldliness or insouciant disregard of self; to honour the gods, household, racial, national and celestial; to maintain and make claims to all sorts of social identity; to have something that tastes good. None of this appears in Nestle's book – apart from her distress that eating fats and sweets gives people

pleasure – and its absence is a sign that she is more interested in proving that she's right and that the food companies are evil-doers than in understanding what it would actually take to change the American diet.

Americans seem to care a lot about living a long and healthy life, and, if they could reliably identify the counsels of genuine nutritional expertise, there's a decent chance they would take that advice seriously into account. In that respect, again, they're probably no different from the Renaissance courtiers and scholars who were the audience for Albala's dietary books. But in the 16th century, civic culture had a way of talking back to the experts who advised on how to live long and healthily, a counter which is almost inaudible in late modern culture. Montaigne, for example, doubted that there was genuine expertise to be had, other than that you obtained from your own experience: 'The Arts that promise to keepe our body and minde in good health, promise much unto us; but therewith there is none performeth lesse what they promise.' But even if you could be sure of such expertise, Montaigne thought it was servile to bind yourself rigidly to dietary rules. To make a religion of temperance is unsociable and unbecoming. Occasional surfeit was a condition of sociability, and a refusal to eat what your host put in front of you was incivility. If, in the quest for health and longevity, you made a fetish of abstinence, you might secure your object, but only at the cost of making life not worth living. And if these ascetic physicians 'doe no other good, at least they doe this, that they prepare their patients early for death, undermining little by little and cutting off their enjoyment of life'. The relative absence of these sentiments from contemporary culture testifies to the real respect in which all sorts of medical expertise is held. But the inaudibility of Montaigne's sceptical voice is also a useful index to the decline of the social virtues.

Steven Shapin teaches at Harvard and has written several books on the history of early modern science. His next will be *The Life of Science: A Moral History of a Late Modern Vocation*.

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