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EDITORIAL

Changing our eating habits by playing the cultural trump card

Jan Boersema and Andrew Blowers

One of the most tragic developments in our modern world is that, in one way or another, food has become problematic across the board. From the beginning of time people have wrestled with the question whether there was enough to eat, and that is, sadly, still the case in many parts of the world. But now that production is – fortunately – adequate in many regions, we are witnessing the emergence of another problem: too much food and the wrong kind of food. Overindulgence is threatening the health of hordes of well-off human beings and unsustainable production processes are constantly adding to the burden on the natural environment. This development is tragic for two reasons. First, because, on paper, the problem seems soluble. The Earth can easily feed the seven billion people who live on it in a responsible and just manner – even eight or nine million under the right conditions (Butler 2010; Foley et al. 2011). The second reason is related to the fact that we have managed to turn one of the most quintessential and positive elements of human existence into a major problem. Philosophers have been telling us for centuries that we are, in a sense, what we eat. And they are right. Food is the link between us and nature, and what we consume transforms us materially into what we are. But this matter is not separable from spirit. Food is not separable from conscience. Food is also culture, and our view of the world has implications for what and how we eat. We are in danger of losing this broad, cultural and philosophical view of food. This editorial is, on the one hand, a plea to look at the problems realistically, give them a name, and look for solutions; and, on the other, a rallying cry to take things forward and drill down to the cultural and philosophical core. If we are to change the way we feed ourselves we need to do both, we must think and act inclusively. If we stop short at thinking, we will merely get bogged down in technocratic quasi-solutions which will not be sustainable in the long run. So at the end of this editorial the focus tends to be more and more on the moral issues affecting the west – mainly Europe – and what might be done about them. We must reconnect our food, and everything that goes with it, with our vision of life, with our beliefs about the quality of existence and the well-being of humans and other living organisms.

Modern problems

Shortages

The global problems surrounding food can be encapsulated in three terms: shortages, surpluses and wrong. At face value, the first problem, food shortages, seems to be primarily a question of distribution. For decades enough food has been produced worldwide to sustain every living soul on the planet. In fact, the increase in

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the global food production has overtaken the increase in population, at least since the green revolution of the sixties and seventies. There are very few countries that do not produce enough to feed their own population. But millions still go hungry. That's because the food never arrives on their plates. Behind this fact lurks other problems. Many people are either too poor to buy enough food or they cannot get access to food because of corrupt governments, brutal conflicts or inefficient distribution channels, or because they cannot produce enough locally. Migration to the cities, low food prices on the world markets, the absence of a serviceable demand in the region and the high price of artificial fertiliser are to blame for the failure of local agriculture and the dependence on food supplies from elsewhere. Asia has been more successful than Africa in getting to grips with this problem in recent years. Emergency aid is as detrimental as it is necessary in Africa since it inhibits domestic development. This situation is creating massive dilemmas. Making cooperation projects contingent on good governance seems just as irresponsible as turning a blind eye to the ineffectiveness of such projects in corrupt and violent regions. Aid and development subject to conditions? Stepwise improvements? Take a leaf out of Asia's book? Political and humanitarian pressure on corrupt regimes and trading practices? A custom-made mix for each situation? All are sensible suggestions, given that simple solutions are not forthcoming.

In the meantime, we have to deal with a growing world population which, if it continues to grow at the present rate, will outstrip the food production. That moment has not yet arrived, but the "curves are evening out"; the growth rates of grain and rice production, for example, are on the decline (Vital Signs 2009). Clearly, there is no way that a truly sustainable world can be attained if the world population keeps expanding at the pace of the past two centuries. Fortunately, that scenario is unlikely to materialize as many countries have passed stage four of the "demographic transition" model and now have low birth and mortality rates, so the natural population growth, if any, is minimal. As a result of greater prosperity and better opportunities for women, the child population in most developed countries is around or below replacement level. Obviously, birth control has helped to shape this trend, but research has shown that birth control would not work quite as effectively without the underlying motivators of a better standard of living and women's rights. Population growth rate has now passed its peak in most continents and the most realistic expectation is that by the end of the 21st century the world population will have increased only slightly or not at all. A lot will depend on Africa, where there is still robust growth (UN 2010). Education and the elimination of poverty are therefore key milestones on the path towards a stable world population. A secure and adequate food supply system – and, of course, a stable government – are crucial factors in this process, but they are mutually dependent, so we face a Catch 22 situation. Where does one start? How does one find the upward spiral in this continent, with countries like Somalia and the Congo?

According to the middle scenario made by the UN population division the world population is expected to rise by two or three billion in the coming decades and stabilize at around nine or ten billion (UN 2010). Some people are calling for a new green revolution led by genetically modified crops, and possibly animals, to feed all these extra mouths. Despite vigorous lobbying by conservationist and environmental groups in the West, genetic modification is forging ahead. Genetically modified corn (Bt corn) has already captured a large share of the market and will never disappear from the scene. The disasters that were foretold by the environmentalists have not

happened, but the same applies to the golden mountains – to solve the hunger – that are served up to us in the advertising campaigns of Monsanto and other producers of GM crops. No disasters and no golden mountains – that is also what might be expected in the future. When people debate GM food in relation to famine and poverty issues, they invest the arguments with strong moral connotations and divert our attention from both the environmental risks and the societal causes of hunger. The problem with food is not that there is none, but that it does not reach the people that need it most. If GM producers want to make a meaningful contribution to the environment and the fight against hunger, they should first of all improve the independence and living conditions of small-scale farmers instead of increasing their dependence on the seed and pesticides that they themselves supply.

Surpluses

While stomachs are empty in some parts of the world, they are overfull in others. Moreover, untold quantities of food end up in garbage bins. Disposal seems almost to be a chronic by-product of prosperity. Restaurants and households throw away food as well, in small quantities admittedly, but on an almost daily basis. In monetary terms between two and four billion euros vanish into the Dutch dustbins every year. Worldwide we lose between 30 and 35% of our food for all sorts of reasons (Butler 2010). Our propensity to overeat is also part and parcel of our changing working circumstances and lifestyles. What used to be sufficient is now too much for the majority of people. Eating patterns should be adapted to fit in with lower levels of physical labour and exercise, but food is getting more affordable and available by the day. These are opposing forces. But this is not only about quantities. It appears that the one-sided composition of our food is every bit as bad for us, and that it even enhances the adverse effects of the excessive quantities. And we are warned against diets with too much ''wrong'' fat, red meat, alcohol and sugar and not enough fibre and vegetables. These problems are well enough known but they are not diminishing despite all the knowledge and attention, and even though the ancients knew the answer centuries ago. After all, as Aristotle said: ''Everything in moderation''. As a result, food-related illnesses such as cancer, liver disorders and arteriosclerosis are among the main causes of death in the prosperous regions of the world. Their prevalence increases also because people are living longer. Obesity is becoming commonplace and – because of its serious economic, psychological and social side-effects – a major problem for society. But some progress has nevertheless been made. A few decades ago, there was great concern about the effects of all sorts of additives and pesticide traces in our food, but in the developed world the content was dramatically reduced and the concern subsided. There has been a sharp decline in deficiency-related illnesses.

Wrong

In the past, when we said that fish was ''off'' we meant that it was rotten. Nowadays, fish that is ''off'' is fish that we, as aware consumers, should not eat because over-fishing is causing the populations to shrink dramatically (Greenberg 2010). The adjective ''off'', when applied to fish, is part of a broader context. It should be used in the restaurant sense of ''off-the-menu''. We are becoming increasingly aware that what we eat affects not only our own personal health but also the health of the planet

we live on. The seriousness of these effects is getting clearer all the time and is quantifiable. Around 1980, our footprint, our impact per year, passed the limit that the Earth could support. In hectares each of us uses globally an average of 2.3 hectares while we only have 1.8 hectares available. It would not come as a surprise if the distribution of this use turned out to be grotesquely lopsided across the world. At present, for example, the average Netherlander uses 4.8 hectares. We use 1.6 hectares of this for food, but only 0.9 hectares is available for food for every world citizen (half of what is available in total). The "foodprint" therefore accounts for a substantial part of the whole footprint, but – in relative terms – it is less heavily exceeded. If we look at our western food package we see that the greatest contributors to the environmental burden are meat and dairy produce. At this point, we run into a looming problem, because when prosperity grows, so does the consumption of meat. That is a fairly well-proven historical relationship. If more prosperity is needed to come through the demographic transition and attain a stable world population, then we can expect more meat consumption in countries like China in the future and more dairy produce in India. And if that trend continues, the global demand for meat will double from 228 million tons right now to 463 million tons in 2050 (FAO 2010). All the more reason to temper the consumption of meat and dairy produce in wealthier countries. But not the only reason. Conservative calculations by the Food and Agriculture Organization of the UN indicate that greenhouse gas emissions from livestock farming worldwide are 40% higher than emissions from all the cars, lorries, trains, ships and aircraft put together (FAO 2006). It was these and other shocking statistics which, to some extent, inspired the film *Meat the Truth*, which is a sequel of sorts to Al Gore's smash hit *An Inconvenient Truth* and has drawn some attention. A full vegetarian diet brings the "foodprint" within safe limits in one fell swoop. There are of course other factors. The mileage that food covers to reach our tables also mounts up and huge amounts of fossil fuels are needed to grow vegetables out of season in greenhouses. Locally grown produce and seasonal food seem the most obvious answer. Such ideas feature time and again in green magazines, and a shift in that direction would certainly do no harm. At the same time, a trend has emerged in the form of farmers' markets and farm shops that shortens the lines between producers and consumers. Whether this model can be scaled up remains to be seen. For the time being, it is an interesting niche market which appeals particularly to adventurous city-dwellers with plenty of disposable income.

These recent developments have made people shout even more loudly for "ecological" or "organic" farming and shown the animal welfare organisations that they were right all along. Historically, these are kindred but differently motivated movements. Organic farming is a broader version of bio-dynamic agriculture, a propagation method preached by Rudolf Steiner a century ago and with strong links to anthroposophy. Most of the followers are in German-speaking countries but bio-dynamic agriculture has also taken root in other European countries. The emphasis on the philosophical aspects prevented its agricultural practice from spreading further. Organic agriculture has divested itself of these ideological trappings and focuses on crop-growing methods that promote animal welfare, wildlife conservation and a healthy environment. It is characterized primarily by the rejection of artificial fertilizers and chemical pesticides. In terms of followers organic agriculture has long since overtaken bio-dynamic agriculture. Both methods are accredited and the products are recognizable by their logos.

The credentials of the animal welfare organizations go back even farther. They are the descendants of a Christian-inspired movement that sprung up in England in the first half of the nineteenth century. At first it championed the cause of domestic pets but before long it was embracing livestock as well. It was an ethically-based movement in which wildlife and the environment barely figured. The consumption of meat was, however, an issue from the start, with people quoting (and still quoting) Classical and Christian writings (Young 1998). The movement continued in this vein until the end of the last century, but it has spread since then, most notably in the formation of the Party for the Animals which has held two seats in the Dutch Parliament since 2006. That is a global first, but the Animal Party is still derided by many people – as were its predecessors, who defended animal rights in the British Parliament in the early nineteenth century.

Finally, more attention is being paid to the working conditions and earnings of the producers. Child labour is illegal in developed countries and is dying out in other parts of the world. The disproportionate distribution of earnings in the production and processing chain is now a topical issue. A fairer trading system can be developed by reaching multi-year agreements that guarantee a fair income for the primary producers, mostly smallholders and artisans. *Fair Trade* products have already won a modest but steadily growing share of the market.

So it looks as if, at the start of the 21st century, we in the Western World are witnessing a broad-based movement committed to bringing about radical reforms in the food supply. Our eating habits are wrong and need to be changed. Food is not being sustainably produced; this is something that needs to be changed too. The health of the consumer, the welfare of animals, and the future of the planet depend on it. But is it happening?

When you study the figures, you can discern changes in eating patterns, but no large-scale ''greening''. There is still a massive industry in factory farming, which is moving sluggishly and piecemeal in a more environmentally- and animal-friendly direction. On the other hand, there has been scarcely any rise in the number of vegetarians. We see the same low percentages for eco-consumers and Fair Trade products, though the percentage of the population in the developed world that uses these products has been rising. There is a latent growth market. Somehow or other, more and more people do want change but nothing much is happening. Why not?

Precious freedom?

The freedom to make our own choices, like freedom of expression, is a human right. Personal responsibility has always been an important principle in western democracies. This is why, for example, there is no ban on battery-farmed eggs and there is still a lot of ''off-the-menu'' fish on sale. Most governments prefer to educate the public on such issues and to encourage transparency rather than imposing stringent regulations. But this begs a number of questions. To begin with, this is not a black-and-white question of either freedom or regulation. A lot of things are regulated. Governments have always used regulations to combat fraudulent practices in the food industry, particularly in relation to pure weights and the sale of rotten goods. Later, other regulations were introduced to improve public health and production processes. Such regulations are introduced as part of a duty of care for the health of the consumer. Only recently has animal welfare been included in the frame. But many more strides could be made in this direction without undermining

consumer freedom. For example, greater alertness could lead to the timely control of ecologically toxic substances such as antibiotics and artificial hormones. A ban could easily be imposed on the processing of bad – hard – fats and other European governments could follow the recent example of Denmark and introduce a ''fat'' tax. A bit more ambition would not be amiss, but governments suffer from ''cold feet''. Why not set quantitative objectives, say, cut meat consumption by 33% by 2020? Regulations, information and transparency are the means to the ends. All of this is totally in keeping with a government that sets, and should set, limits on a free market.

Another option is to pass on the external costs and ensure that the producers get a fair deal. At the moment, many of the costs are diverted. (IVM 2010). Never in our history have we spent such a small share – e.g. in the Netherlands less than 10% – of our income on food (CBS 2008). This is only possible because the actual costs are diverted. So, a lot can be won by fair pricing. A meat tax and a CO_2 tax would send out strong signals about more sustainability in the direction of both the consumer and the producer.

But the greatest change will still have to come through a voluntary switch to more sustainable food. Not just because of the ''wrong'' aspects but also because we are getting too much of a good thing. A clear example of the latter is alcohol. A changeover in that domain will require a cultural shift.

Facts, motives and values

Anyone who wants to engineer or promote voluntary changes in behaviour will have to find out first why people act as they do. Only then is there a prospect of a feasible strategy. And that goes some way to answering our question as to why people don't reduce their *foodprint* by eating more sustainable food. People don't eat for environmental reasons or to make a *foodprint*. We eat for all sorts of reasons, but seldom because we want to raise CO_2 emissions or because we want to make an animal's life a misery. We eat for totally different reasons, and these emissions and that suffering are by-products that none of us asked for. A lover of Italian cuisine who serves Parma ham on a regular basis is unlikely to check out the food mileage it has clocked up. That kind of information does not really get through; people prefer not to know. They may be amenable to the argument that what they are eating is really Dutch ham disguised as Italian. They may deplore a negative relationship between the quality of the ham and the living conditions of the pig. Information must tune into the primary motives if it is to have any real impact (Hoogland et al. 2005; De Boer et al. 2007). So it is imperative to gain a clear idea of the underlying motives and the social contexts in which they operate. Sometimes there are more animal and environmentally friendly alternatives that will not ride roughshod over these motives and which might even be in tune with them. But most of the time, things go just that bit deeper, and culturally embedded values appear that are immune to change in the short term. The past has taught us that innovations and renewals usually come in the form of replacements, or they transfer functions from one product to another (Montanari 2004). So, to bring about meaningful change, another set of instruments is needed. Pricing and regulations will be less efficacious in this situation than upbringing and education. Our eating habits are no less rooted in our upbringing than our norms and values. Perhaps other ''agents of change'' are also needed. People can respond well to the messenger, because they unwittingly include the ''world'' of the messenger in the message. If an eccentric-looking young

lad with an eyebrow piercing talks to a staid and middle-aged audience about the ecological footprint of overeating, his message will be conflated with the values that this kind of audience tends to associate with this kind of figure. If they dislike these inferred values, perhaps because they are too left-wing, too secular or too liberal, the facts will fail to register or they will be linked to the values and summarily rejected. People do not perceive facts as separate from the values, so if they accept the facts, they feel that they are accepting the values as well. Conversely, if exactly the same story is told by a person with whom they identify, who reminds them, say, of their GP or the local vicar, then the facts will get through. People will recall them more easily and be more likely to reflect seriously on them in relation to their own behaviour. And it's purely and simply because they share the values of the messenger, even though these may have no bearing whatsoever on the message (Kahan 2010). The rose-coloured idea that a respected member of the community who is conversant with the facts will make responsible choices is not substantiated in practice (Hoogland 2006). This theory is based on an over-rationalized vision of human behaviour.

Societal trends

Many changes in our food culture are elicited, encouraged or shaped by societal changes. The initial purpose of these societal changes was not to reform our eating patterns, but that's what happened anyway. Smaller households and different daily rhythms have weakened the ritual "family mealtimes at home". More women have embarked on careers and more men do household chores. The number of hours spent "in the kitchen" is steadily diminishing. There is a bit of a paradox with, on the one hand, an obsession with food, diet and celebrity chefs and, on the other, a predominantly fast food or ready meal cooking and eating culture. Increased prosperity is another contributory factor because more people are eating out, especially the younger generation. People are travelling farther to work and skipping breakfast because more and more time is needed for commuting. As a result, fewer families eat together at home. To some extent, this custom has been replaced by communal meals in the work canteen or at school, but also by "grabbing a quick bite". The food industry and the supermarkets are cashing in on these trends and strengthening them by selling convenience food. In modern society, particularly in the big cities, food is available anywhere and any time. So, we sustain ourselves with a breakfast drink in the car and a take-away wrap in the train.

The globalization of people and goods is another big societal change. Cultural diversity has grown by leaps and bounds in almost every country, causing radical changes in the choice of foodstuffs. Even in tiny villages, people are being introduced to different kinds of food and food cultures, even if only by asylum seekers. This has transformed the native food culture across a broad front, even though, as Montanari (2004) shows, many of the changes are in effect "variations on an underlying structure". Pastas have 'rendered potatoes 'passé' as a basic ingredient and, in the UK, roast chicken has been overtaken by chicken tikka masala as the most popular chicken dish.

Anyone who aims to change our *foodprint* and to win us over to more sustainable eating habits will have to take the societal context on board, complete with its diversity. The way we get our daily protein quota differs between countries and even between regions (De Boer et al. 2006). This requires social and cultural sensitivity.

There is no point in protesting against convenience food when the amount of time that some people have at their disposal to prepare food has been consistently diminishing for decades. ''Healthy and quick'' appeals much more to that target group. Other groups should also be targeted, such as canteen managers, restaurateurs, snack bar owners and, of course, the food industry. And that calls for a whole new weapon arsenal and perhaps other ''agents of change'' to get things off the ground. But does ''taking on board trends and underlying values'' mean that we have to chase after every trend and facilitate and accommodate everything? No, but the change processes on the path to a sustainable society could improve effectiveness by engaging in a serious analysis of the ideologically based social and cultural dimensions and making allowances for them (Schösler 2010). A case in point is meat consumption.

The meat culture

Not all that long ago meat was a scarce product, enjoyed only by the social elite and certain groups, such as soldiers. The industrialization of meat production coupled with rising incomes turned meat into an everyday commodity in the space of around a century. Vaclav Smil showed that, to a certain extent, economic growth is accompanied by a rise in the consumption of meat, largely because the middle class strives to emulate the status-conferring patterns of the upper class (Smil 2002). At around 85 kilos per person each year the consumption in the Netherlands seems to have more or less reached its limit, but emerging economies such as China and Brazil are still climbing. Everywhere in the world, meat is a deeply symbolic food. In the past, it was associated with virility, physical prowess and manliness. Research in various European countries has indicated that women generally prefer vegetables, white meat, fruit and light meals while men prefer red meat, potatoes and hearty meals. Men also eat more meat than women in absolute terms, especially red meat. The consumption of meat also symbolizes human mastery of nature and implicitly confirms a cosmology in which animals are merely objects to be used by humans (Fiddes 1994). Despite the regional differences in the quantities of consumed meat there are underlying universal patterns. Research on Western food cultures has uncovered trans-cultural food hierarchies. At the top are animal products: first red meat, followed by white meat and fish, then eggs and dairy produce, fruit and leaf vegetables, then tubers, and with grain bringing up the rear (Twigg 1984). In the interests of sustainability and health this hierarchy should ideally be reversed.

The culinary status of food is directly linked to the relative importance that is attached to the context of the meal (O'Doherty Jensen 2002). Festive occasions such as Christmas Dinner and the Sunday Roast set the scene for extensive dining, crowned with a special cut of meat. We eat simpler meals during the week than at the weekend. The central role attributed to meat is expressed in many ways. Take, for instance, the way in which dishes are often named after the meat they contain. The food hierarchy is also reflected in the presentation of traditional dishes in smart restaurants with the meat positioned majestically in the centre of the plate, flanked by a few vegetables and a bit of garnishing.

These observations are relevant to the change strategies and the pace at which we can bring about change (Schösler 2010). In cultural terms meat substitutes are not yet a match for ''real'' meat, but they could work in the case of processed meat. In regions with a notoriously masculine red meat culture, such as Texas and large parts

of South America, it would be better to aim for smaller portions. Financial incentives and health-related arguments could be mobilized as support. In North-West Europe a shift towards more animal-friendly meat production combined with smaller portions is a strategy rich in opportunities. We are already seeing that people who believe we should care for the environment instead of exploiting it are more inclined to make such choices (De Boer et al. 2009). Mediterranean countries are witnessing the rise of the Slow Food movement, which places the emphasis on taste, craftsmanship and local culture. Pride is the trump card that can be played to win more sustainability. The quantitative and cumulative effects of shifts that are achieved through these means can be considerable. In the longer term the misconceptions about the status of meat can be corrected through education and schooling. The associations between masculinity, physical prowess and meat consumption can be weakened through further emancipation. A mix of creative vegetarianism and a responsibly produced piece of meat or fish should be embraced by the cultural elite as part of their preferred lifestyle. Serving sushi with pieces of bluefin tuna and other endangered species should be regarded as barbarian and culturally unacceptable. The menu for state banquets, government dinners and publicly funded receptions should reflect this preference. People should be able to see our vision of the good life in our food culture, on our plate and in our glass. Not in a trivial – flirtatious or dilettante – sense, but in the classic philosophical sense, as an answer to the question of how life can be lived well and ethically at one and the same time.

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