Health:  
A Wake-Up Call

The fact that we went into the COVID-19 crisis with such high rates of obesity and diet-related disease has undoubtedly contributed to the UK’s appalling death rate. These are among the worst risk factors for dying of the virus, demonstrating quite how damaging the modern western diet is to the human body.

If we want to better withstand future shocks, we must address our dietary ill-health. But its causes are complex: the interplay of personality, genetics, culture and environment. Any solution will also have to consider carefully the delicate relationship between the individual and the state.

We welcome the Government’s recently announced measures to kick-start this effort.
COVID-19 has not, after all, proved to be a “great leveller”. On the contrary: it is a highly discriminatory virus, affecting Black and Asian people more than white people, men more than women, the old more than the young, and the poor more than the rich. It preys, above all, on the physically frail.

The three biggest risk factors for dying of COVID-19 are, in descending order: being over 70; having had an organ donation, recent blood cancer or neurological disease (other than dementia or stroke); and being severely obese or having uncontrolled diabetes. (See Figure 3.1.)

Obese people are 150% more likely to be admitted to intensive care with COVID-19, and severely obese people over 300% more likely. Looking specifically at death risk (see Figure 3.1), people with Type 2 diabetes (both controlled and uncontrolled) are 81% more likely to die from the virus. In the age of COVID-19, a poor diet is almost as great a threat to life as cancer or old age.

Figure 3.1
Diet-related disease sharply increases likelihood of death from COVID-19

Type 2 diabetes adjusted for age, sex, deprivation, ethnicity and geographical region, all other risk factors fully adjusted. Type 2 diabetes hazard ratio attenuated to 1.81 when also adjusted for previous hospital admissions with coronary heart disease, cerebrovascular disease or heart failure. Range indicates upper and lower confidence levels.
It is extraordinary, really, that the dietary ill-health of this country hasn’t been seen as a medical emergency until now. Even before COVID-19, an estimated 90,000 people died from diet-related disease every year in the UK (one in seven deaths), losing an estimated total of 1.3 million years of life. That’s an average of 14 years per person; years lost not just to them, but to their partners, parents, siblings, children and friends.

Poor diet isn’t just killing us – it is also reducing our quality of life. The proportion of life spent in good health is falling. Since 1996, for example, the number of people diagnosed with diabetes in the UK has risen by 250%, from 1.4 million to 3.5 million (with another 500,000 people estimated to be undiagnosed). The World Health Organisation uses a measure called disability-adjusted life years, or DALYs, to quantify the burden of disease beyond early death. DALYs measure the total years lost to early death, ill-health and disability – thus combining mortality and morbidity. To give a crude example: if you were to die of heart disease ten years before the average lifespan for your sex, and were also severely disabled by the condition for the last three years of your life, your DALYs would be shortened by thirteen.

In 2017, 300,000 years of good health were lost to diet-related illness or disability in the UK, with all the worry, work and logistical strain that such a situation entails for the sick person and their loved ones. Once premature deaths are factored in, the total DALYs lost to the population that year was 1.6 million.

There is also an economic cost to all this illness. Obesity alone costs the NHS £6 billion a year (5% of its budget) – and that’s without factoring in the social care costs associated with many of the conditions that obesity can cause including Type 2 diabetes, heart disease, malnutrition and some cancers.

The broader cost to the economy is even more sobering. We can estimate a number by taking the DALYs and multiplying them by the average productivity of a British citizen in work. By this calculation, poor diets account for an astonishing £54 billion every year in lost earnings and profit. (Of this total, 82% is from lost years of life and 18% from years lived with disability.)

The suffering caused by the modern diet is felt most acutely by the poorest in society. Obesity is significantly more prevalent in the lowest income decile than in the highest (36% of the most deprived in society are obese, vs 21% of the least deprived). The statistics are even more skewed for children. By the age of 11, children from the poorest neighbourhoods are three times more likely to be obese than those from the richest ones, and this gap is growing.

But even the rich have a weight problem. As Figure 3.2 shows, this is a population-wide issue, with obesity rates above 20% across all parts of society.

How did we get to the point where our food – our source of life-giving sustenance – is making so many of us sick? And why has it proved so difficult to do anything about it?

Figure 3.2
Over 1/3 of the most deprived people in England are obese

<table>
<thead>
<tr>
<th>Index of multiple deprivation</th>
<th>Underweight</th>
<th>Normal</th>
<th>Overweight</th>
<th>Obese (excludes severely obese)</th>
<th>Severely obese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most deprived</td>
<td>2</td>
<td>32%</td>
<td>30%</td>
<td>30%</td>
<td>6%</td>
</tr>
<tr>
<td>Average</td>
<td>2</td>
<td>34%</td>
<td>35%</td>
<td>26%</td>
<td>3%</td>
</tr>
<tr>
<td>Least deprived</td>
<td>4</td>
<td>36%</td>
<td>37%</td>
<td>23%</td>
<td>3%</td>
</tr>
</tbody>
</table>

The English Indices of Multiple Deprivation are an official measure of relative deprivation in small areas in England. This graph splits the index into quintiles, from most to least deprived to show how deprivation is correlated to weight.

†† Costs have been assigned to DALYs on the basis of Gross Domestic Product per capita (methodology taken from the Food and Land Use Coalition (FOLU) report: Growing Better: Ten Critical Transitions to Transform Food and Land Use (2019)), to quantify the loss of life, quality of life and labour productivity from food-related illnesses in the UK; Global Burden of Disease database, IHME, 2017.

1 In making the actual calculations, different conditions would usually be weighted for age and severity.

11 Global Burden of Disease database, IHME, 2017. Note that DALYs are used here to estimate the economic impact of poor diets rather than the NHS costs directly attributable to diet.

111 Costs have been assigned to DALYs on the basis of Gross Domestic Product per capita (methodology taken from the Food and Land Use Coalition (FOLU) report: Growing Better: Ten Critical Transitions to Transform Food and Land Use (2019)), to quantify the loss of life, quality of life and labour productivity from food-related illnesses in the UK; Global Burden of Disease database, IHME, 2017.
Daddy? Were you this chubby even when you were young?

Why do we eat what we eat?

My 8-year-old daughter woke me up the other morning with a question. "Daddy?" she said, her inquisitive face looming over mine. "Were you this chubby even when you were young?" It was a bruising start to the day. And the answer, when I tried to locate it, proved elusive.

Throughout my life my weight has oscillated – sometimes gently, sometimes more violently – between the high end of what the NHS would define as normal and the low end of obese. I have tried to flatten out this roller coaster with exercise and healthy eating regimes. I have done marathons and aquathons. For a time, I used a fitness programme on my children’s Wii Fit console. At the end of each workout I had to stand on an electronic plate to be weighed. My animated avatar would pump the air in celebration as confetti rained down on screen and a disembodied robot voice offered the faint praise: "Less obese!"

If you were to ask me why I struggle to maintain a "healthy" weight, I wouldn’t honestly be able to tell you. I cook all my meals from scratch, eat many more than my five portions of fruit and veg a day and almost never have sweets, puddings or ready meals. But I’m greedy. I eat too fast. I drink wine. I’ll snack on any passing food when I’m stressed. Maybe it’s genetic: my grandfather had the same barrel shape as me. Or maybe I’ve damaged my metabolism with all this yo-yo asceticism.

I’m not telling you this because there’s something special about my predicament. Quite the opposite. If you talk to anyone in the UK whose BMI has at some point crossed the threshold into "obese", you will hear different explanations, but a similar perplexity.

The primary cause might be identifiable – a tendency to comfort eat in response to stress, perhaps, or a diet of junk food. But almost always there are many interconnecting factors that cause people to put on weight. Our lives are complex and so is the food environment we inhabit.

The average weight of the UK population has steadily increased since the Fifties (see Figure 3.3), in sync with the growth of intensive farming, more widely available and cheaper food, the rise of the sedentary job and the proliferation of labour-saving devices. But some humans appear to be more susceptible than others to this new high-calorie, low-exercise world we inhabit. Understanding why is essential to planning any public health interventions.

Figure 3.3

The average weight of the UK population has steadily increased.

Data before 1992 are UK estimates, from 1992 onwards data are England specific. 1955 mean BMI interpolated from US historic BMI trends and UK BMI from 1977 onwards. Distribution before 1980 is directional using normal distributions around mean value and, therefore, is not an exact representation.
1.6 million years of good health are lost to diet-related disease and death each year – not just to sufferers but to partners, parents, siblings, children and friends.

When researchers try to untangle the various factors that influence what people eat, they use the terms ‘individual’, ‘social’ and ‘material’. (In layperson’s terms, nature, nurture and environment.) This is the ISM model and it is used extensively by the Government’s Behavioural Insight Team (BIT), commonly known as the “nudge” unit.

“Society is a product of billions of individuals’ actions,” explains the Chief Executive of BIT, David Halpern, who sits on my Advisory Panel. “But those individuals are equally a product of their society.”

Halpern defines the three main factors that shape our eating habits like this:

- **Individual**: “inner” psychological drivers of our behaviour, both conscious and unconscious. This includes our personal tastes and preferences, values and beliefs, but also ingrained habit, emotion, heuristics (mental shortcuts) and cognitive bias.

- **Social**: other people’s influence on our behaviour, including cultural norms and narratives, peer influence and social identity.

- **Material**: the wider physical and economic context. This includes the physical environment, pricing, individual financial circumstances, mass media and advertising and technological factors – all of which shape our food environment.

These categories are not mutually exclusive. The way a product is marketed, for example, may affect all three. In the 1960s, the Milk Marketing Board decided to create an entirely new “traditional” meal. The “Ploughman’s Lunch” – fashioned from a commonplace, but not well-defined, combination of cheese, bread, beer and pickle – was a branding exercise designed to sell more cheese.50 Five thousand “Ploughman’s Lunch Showcards” were distributed to pubs by the Board. It worked: the name stuck, and the Ploughman’s Lunch became a fixed part of the material environment on menus of pubs in the UK. It is now a social norm, as the thing we order in a pub without even looking at the menu.

So, all these factors interact all the time. But, to understand them properly, it is worth looking at each one in isolation and then seeing how they combine to affect the lives of citizens. We will take them in order.

**Individual**

The behaviour of any individual is – as Churchill said of Russia – a riddle wrapped in a mystery inside an enigma. The quirks of upbringing, experience and DNA that shape a person’s eating habits are largely beyond the scope of politicians and policymakers.

We tend, therefore, to talk in generalisations. At a dinner I attended recently to discuss the food system, a former Government minister declared confidently: “We don’t have a national obesity crisis, we have an obesity crisis among poor people.” This simply isn’t true. As we saw above, while obesity levels are higher for the lowest income group, they are over 20% across all income levels.51 If we’re going to generalise about the nation’s eating habits – which to some extent we must – we should try to do so with the greatest possible accuracy. The National Food Strategy has analysed the data from dietary studies of 1,750 UK residents using a statistical technique known as latent class clustering.

We found clear patterns emerging, which enabled us to divide the adult population into six statistically distinct groups (see Figure 3.4 on following page). The members of each group share similar diets and attitudes to food and – unsurprisingly – have similar health outcomes. Understanding each group better should provide clues about the most effective ways to help different people improve their diet. In Part Two of the National Food Strategy, we will examine these groups in detail and consider how best to help each one eat well.
How we eat: profiles of typical UK eaters

Rainbow eaters – 25-44 year olds working with high levels of education. They are in work, but also have dependent children and often eat at the table at home. Their diets are varied with lots of fruit/veg and fish and low levels of sugar, but high in calories and fat.

Refuelers – Low income people who are either young adults or over 75, who often eat alone at home. Their diets are high in sugar and low in protein.

Fast food lovers – Young adults, in full time education, who often live at home and eat fast food at restaurants or while watching TV. Their diets are high in sugar, salt and fat and low in fruit, veg and protein.

Pound stretchers – Lower-income people of all ages who often eat at home alone while watching TV. Their diets are high in red meat and low in fruit, veg and fish, but also in sugar and alcohol.

Restaurant eaters – High income, time poor, middle aged people who often eat out. Their diets are high in meat, salt and alcohol and low in fruit/veg and fish.

Traditional eaters – Older people with a medium-high income who often eat at home and cook for themselves. Their diets are high in fruit/veg and fish, but also alcohol.
Social

Cooking for, and eating with, other people is a mark of friendship in every culture. The word company is derived from Latin: com, "with", and pan, "bread". Literally, someone who eats with you. Food finds its way into every aspect of our social lives, including our rites of passage and religious festivals.

But the UK does not place as high a social value on food and cooking as our continental neighbours. Before lockdown forced us to take up home cooking, we spent a smaller proportion of our income on meals at home than any other European country. We tend to rush our meals, spending almost half as much time eating as the French. We eat out more, cook less, and are much keener on ready meals. (Our household spend on pre-prepared food is 28% higher than in France, 64% higher than Spain, 101% higher than Germany and a whopping 178% higher than Italy.)

We eat too much salt, red meat, saturated fat and sugar and way too few fruit and vegetables – see Figure 3.5. We have eagerly adopted the new technology of home delivery apps. McDonalds announced last year that, just 18 months after its delivery service launched in the UK, an astonishing 1 in 10 McDonalds orders now reaches the customer on an Uber Eats bike.

Figure 3.5
We mostly fail to meet dietary recommendations

83% of people say healthiness is a key priority when shopping for food

75% 27% 34% 48% 72%

25% 73% 66% 52% 28%

Hitting nutritional target

Missing nutritional target

Fruit and vegetables Salt Red meat Saturated fat Free sugars

Free sugars are typically added, and not those naturally present in the cellular structure of foods.

The relative weakness of Britain's food culture goes back a long way. Some historians blame the industrial revolution, which happened faster and harder here than on the continent. The British were wrenched away from the land, and from our longstanding rural food traditions, much earlier than the rest of Europe. Closeness to land, the argument goes, gives people knowledge, familiarity and confidence with food. The Industrial Revolution severed those ancient ties. Whether because of this dislocation (which happened later but with similar abruptness in America), or something else in the Anglo-Saxon tradition, our food culture bears more relation to that of the USA than to our European neighbours. (See Figure 3.6 on next page.)

† Between 1800 and 1880, the proportion of Britons living in cities tripled, from 20% to almost 60%. By contrast, only 30% of the French and German populations had gone urban by 1880. It took France until 1950 to get to the 60% mark.
Figure 3.6
UK food spending is lower than most comparable countries\textsuperscript{57}

![Proportion of consumer spending on food eaten in the home (excluding alcohol)](image)

British people eat quickly\textsuperscript{58}

![Minutes spent eating per day](image)

Data are for the latest year available

The National Food Strategy: Part One – July 2020
The UK does not place as high a social value on food and cooking as our continental neighbours.

Figure 3.7
We spend almost half our weekly grocery shop again on eating out\textsuperscript{59}

- Eating at home: food and non-alcoholic drink
- Eating at home: alcohol
- Eating out: food and non-alcoholic drink
- Eating out: alcohol

_Eating at home_:
- £27.57
- £3.85

_Eating out_:
- £10.65
- £3.27
Material

Is there a supermarket selling fresh fruit and vegetables near you? If so, where are these foods positioned and how appealingly are they presented? Which foods are nearest the tills? Are there sweets and soft drinks placed where you might spontaneously grab them to appease a rumbling tummy or a fractious baby? These are all examples of material influences which affect the food choices we make, often without us even realising it.

The single most important force that shapes our food environment is the free market. Companies produce and promote food that they know will sell. This doesn't mean they only sell junk food: the variety of fresh produce available in supermarkets reflects both consumer demand and capitalist ingenuity.

But too many of the manufactured food products sold in this country are of a kind that should only be eaten occasionally (see Figure 3.8).60, 61 Highly-processed, calorie-dense products are inexpensive because they can be made with cheap ingredients such as flour, sugar and vegetable oil. They typically have a longer shelf-life than fresh food, and – for reasons we shall examine below – they are easier to sell.62

Figure 3.8

More than 3/4 of manufactured products sold in the UK in 2018 were “unhealthy”†.63

Products above 3.5 HSR are considered “healthy” and indicated in green. Grey indicates no rating is available.
There is an argument, sometimes put forward by health campaigners and public health professionals, that the imperatives of the free market make it logically impossible for the food industry to grow in value without making us ill.

The logic goes like this. The UK population is growing at 0.6% every year. Corporations generally target growth rates much higher than that. So, in order to satisfy their shareholders, food companies must find another way to boost profits. Their options are limited. They could keep putting up their prices and risk losing customers. They could export more, persuade the domestic market to eat more, or encourage us to waste more – or any combination of the above. But the basic calculation remains the same: increased profit equals increased volume equals a heavier population.

This isn’t the whole story. Recent history shows that it is in fact possible to find ways of making people pay more money for food without increasing its volume. Although the proportion of household income that we spend on food has fallen since 1957 – because we have become, on average, much richer – the amount we spend per calorie has increased. This is because we are now prepared to spend some of our extra cash on aspects of food – such as convenience, quality and ethics – that were once considered luxuries. The rise of food delivery apps (which carry a price premium), “Taste the Difference”-style ranges, and fair trade and animal welfare marks, all demonstrate how our habits and expectations have changed.

Nevertheless, there will always be parts of the food economy that rely on increasing volume for increased growth. The economics of commodities – anything that is traded in bulk and not as a branded product, such as wheat or sugar – create a system based on volume.

Supermarket Buy-One-Get-One-Free (BOGOF) and other multi-buy offers aren’t just designed to tempt customers from one shop to another: they tempt us to buy more. In 2015, supermarket promotions in Britain reached record levels and were the highest in Europe, with around 40% of our food expenditure going on promoted products. (In the last few months, the share of transactions on promotion has fallen by 15% because of the huge pressure on supermarkets caused by the closure of the out-of-home market.

But perhaps the easiest way to persuade consumers to eat more food is to give us what we crave. Humans evolved to seek out energy-dense food whenever possible and to store this energy in the form of fat. “For millions of years, our cravings and digestive systems were exquisitely balanced because sugar was rare,” writes Daniel E. Lieberman, Professor of Human Evolutionary Biology at Harvard University. “We retain Stone Age bodies that crave sugar, but live in a Space Age world in which sugar is cheap and plentiful.”

This evolutionary craving appears to be amplified when fat and sugar are present together, especially at a ratio of 2 to 1. Human breast milk is one of the few naturally occurring foods with this ratio. Milk chocolate, biscuits, doughnuts and ice cream all follow the same formula.

Serving sugary, fatty, high-calorie foods guarantees a market. As the shelves of any convenience store will testify, there is more money to be made from selling processed snacks than from fresh vegetables.
Balancing profits against moral responsibility is a growing conundrum for many food companies. How can they play their part in creating a healthier food landscape without destroying their own viability?

“This is something that I wrestle with continuously,” says Roger Whiteside, CEO of the high street bakery Greggs, who sits on my Advisory Panel. “We want to do the right thing, but it’s difficult. Consumers won’t be dictated to. If there’s one thing I have learned in 45 years in retail, it’s that you must work with what consumers want.

“We do make commercially suboptimal decisions all the time. When Public Health England came to us about reducing sugar we said ‘OK, we’ll sign up to taking out 20% of our sugar by 2020.’ We have achieved that one year early.

“Most others only got to around 5%. We’ve also put healthy choices – such as salads – in every shop, even where we don’t make any money from them. In the end though, I think you may need more regulation – a level playing field – because if I start making everything less appealing and other people are going the other way, then basically I am just opening up a vulnerable commercial front.”

This is a sentiment echoed by Mike Coupe, former CEO of Sainsbury’s, and Dave Lewis, CEO of Tesco. Both have said that they do not believe that the free market can solve the problems in the food system on its own and that regulation is needed to bring about change.72, 73

There will always be a place for sweets and treats and things that deliver short-term pleasure and do us no good at all. I once attended a children’s party where the only food on offer was carrot sticks. In the tearful eyes of the young guests, I glimpsed a joyless world. The issue is not just which foods companies should sell, but where and how.

One of the most egregious sins of the modern food industry is its habit of clothing itself, and its products, in false virtue. “No added sugar” is the boast on Innocent’s lemon and lime flavoured Juicy Water – quite omitting to mention the eight teaspoons-worth of natural sugars from grapes and pears. “No artificial colours or artificial flavourings” trills the packaging for Percy Pig, the “soft gums made with fruit juice”. These can be found near the tills at Marks & Spencer, within spontaneous reach of tiny hands. How many parents take the time to check the ingredients list? If they did, they might (assuming they know how ingredient lists work) be agog to find that the three largest ingredients by weight are glucose syrup, sugar and glucose-fructose-syrup. (See Figure 3.9.)

I single out Marks & Spencer here, not because it is the biggest sinner, but because it is such a well-trusted company. A British institution, M&S has the pledge “we always strive to do the right thing” as one of its guiding principles. If M&S – which is a great deal more scrupulous than many food companies – is guilty of such trickery, you can be sure the practice is ubiquitous.

Food packaging is increasingly littered with boasts that, if not quite lies, are at least wilfully misleading. “Low fat” often means high starch, but it never says so. The words “free from” and “less” are sprinkled around without context. “Free from” refined sugar, but rigid with fruit sugars? Nutritional values – calories, salt, sugar, etc – are given “per portion”, even when a portion bears no resemblance to the quantity on offer.

Two of the recommendations I was planning to make in this chapter concern the methods most commonly used to promote unhealthy products. But just as I was about to press “send”, the Government stole my thunder (in a welcome way), by unilaterally proposing the same policies as part of its new Obesity Strategy.

The first is legislating to end the promotion of foods high in fat, sugar or salt (HFSS) by restricting volume promotions such as buy one get one free, and the placement of these foods in prominent locations intended to encourage purchasing, both online and in physical stores in England. That will mean no more unhealthy multi-buy offers, and Percy Pig will no longer reside near the checkout.

The second is banning the advertising of HFSS products being shown on TV and online before 9pm and holding a short consultation as soon as possible on how they introduce a total HFSS advertising restriction online.

Both these policies have already been the subject of Government consultations and found to have solid public support. (Generally – as we will see below – the public wants more and stronger state interventions on diet-related health.)

But the restrictions on advertising – much more than the restrictions on promotions – are certain to cause squeals of protest, not least from media companies and food manufacturers. So I want to take a moment here to explain why this is the right decision.
One of the first meetings I had after starting work on this strategy, in January 2019, was with ITV. The idea of introducing a watershed for advertising HFSS products had already been floated by Government, and the television company wanted to make the case against it.

The executives I spoke to made three very articulate arguments:

1. That such a ban would cut off a significant revenue stream, and thus imperil a public service broadcaster.
2. That it might drive HFSS advertising onto less well-regulated online platforms.
3. That it probably wouldn’t even make much difference to people’s eating habits.

Just before the Government made its recent announcement, I heard the same arguments swirling around Whitehall – but with an added jeopardy: advertising revenues are already forecast to be down 20% this year as a result of the pandemic. Terrestrial television companies – which are locked in a ferocious battle for eyeballs with streaming companies such as Netflix and Amazon – simply cannot afford another loss.

The money spent on advertising HFSS before 9pm is indeed high: about £215 million per year. But introducing a watershed would not simply wipe out this revenue stream. Many companies would move to later advertising slots, or advertise different products before 9pm, or even adjust the ingredients in their products so that they no longer fall foul of the watershed.

The Department for Digital, Culture, Media and Sport has estimated that a 9pm watershed for HFSS adverts would end up costing TV companies a collective total of about £112 million per year. This represents 2.3% of combined advertising revenue for these companies. However, terrestrial television companies make an increasing amount of their revenue from selling programmes and direct subscriptions, so the percentage of total revenue lost will be less than that – maybe half as much again. And even this estimate may be too pessimistic.

† 53.44% of ITV’s total revenue was from advertising in 2019/20.
ADVERTISING has a number of functions. The most basic is to inform the public about goods and services and persuade them of their value. It can also be seen as a marker of liberty. The freedom to have an idea and tell as many people as possible about it is an inalienable right of any democratic society. Go to North Korea and you won’t see much advertising.

But to succeed in the long run, advertising also has to be responsible. Ours is a largely self-regulating industry, whose pact of trust with the public depends upon being – in the words of the Advertising Association’s long-running slogan – “Legal, decent, honest and truthful”.

The truth, which is now abundantly clear to everyone, is that this country is facing a health crisis caused by bad diet. It is making us ill, shortening our lives and putting a terrible strain on our health service.

Advertising junk food to children is no longer a decent thing to do. Instead of fighting the new 9pm watershed rule, the advertising industry should be using its power to help fight the health crisis. We all have our part to play in encouraging food companies to invest in healthier meals, and encouraging the public to buy them.

No one is against profit – but profiting from illness and misery is not a sustainable business model.

On commercial grounds, if nothing else, the advertising industry must do the right thing. To succeed, we must be seen as a valuable partner in a changing society, playing our role in a positive way.

There are two examples we can learn from, where advertising HFSS food has already been restricted. In 2007, it was banned from the breaks in children’s TV shows, and in 2019 Transport for London banned HFSS advertising on buses and tubes. Following the 2007 children’s TV ban, HFSS advertising as a proportion of all TV advertising remained stable. In other words, food companies just advertised those products in different slots. After the TfL ban, the total advertising spend remained steady. It seems that advertisers simply advertised other things.

I have heard it argued that these examples are atypical: that the ban on advertising in children’s programmes was small in comparison to the 9pm watershed policy; and that TfL gets much of its ad revenue from smaller companies, so it is not a reliable comparison. But people who know the economics of the advertising industry better than me believe that history will repeat itself.

“We have seen this time and again,” John Hegarty, advertising grandee and a founder of the agency Bartle Bogle Hegarty, told me. “First it was cigarettes, and that was followed by cigars, alcohol, gambling and other categories. Advertising always fills those gaps with new categories that in themselves become more dynamic.” (See Capsule 1.)

The second argument against the watershed is that it will push advertising onto online platforms, which are harder to regulate. This seems to me to be an argument for improving online regulation, rather than giving up. I am pleased that the Government has included online advertising within its new restrictions.

The final argument against the 9pm watershed is that HFSS adverts don’t actually influence what a child eats. This seems an odd proposition. Why spend so much money on advertising if it doesn’t work? To the parents among us, it also feels intuitively wrong.

The science behind what I shall call the “half-a-Smartie” argument is based – in a convoluted way – on a study published in 2018 by the UCL Great Ormond Street Institute of Child Health.
This study analysed evidence from a compendium of sources, including 25 experiments. It concluded "that screen advertising for unhealthy food results in significant increases in dietary intake among children".

Specifically, it found that children exposed to HFSS advertising on TV and in online games consumed an average of 13.6 more calories (roughly equivalent to three smarties) for each minute of advertising they watched, compared to children who were not exposed to the advertising. Children who were already obese increased their consumption by almost half as much again, to 20.9 calories (or four smarties) per minute of advertising watched.

This study was the basis of the Government's impact assessment for the introduction of the 9pm advertising watershed. It concluded that the policy would save the economy £2.7 billion in NHS and social care savings and increased economic output, due to the reduction in Type 2 diabetes, coronary heart disease, stroke, colorectal cancer and breast cancer across the population.81

However, the impact assessment also contained, deep within its 135 pages, a calculation more to the taste of those who oppose the watershed.

Some children get a lot of screen time. Others are strictly rationed. To work out how many calories a 9pm watershed would save overall, the Government's statisticians calculated the average amount of time spent watching HFSS adverts across the entire population of children, and then used that relatively modest figure to deduce the average calorie increase. The grand total at the end of all that was just 2.28 calories a day – or roughly half a Smartie. In other words, say critics of the watershed, it isn't worth the bother.

The second problem is the diluting effect of averages. Some children spend a lot more time looking at screens than others. But a significant increase in Smartie-eating among the avid screen-watchers (especially pronounced in those children whose weight is already a problem) becomes statistically insignificant when spread across the population.

You could, in fact, use this diluting effect to argue from the opposite corner. How many fewer calories do you think we as a country would each have to eat, on average, to maintain our national weight? 500? 200? 100? The answer is actually somewhere between 16 and 24 calories82 – or 3 to 5 smarties. This is clearly a nonsense when applied to individuals (and especially those who most need to lose weight), but mathematically it is sound. Averages are deceiving.

In the context of averages, even 2.28 calories a day – the most modest reduction predicted by the impact report – is actually a big deal. For some people, especially those already struggling with their weight, the effect would in reality be much more significant.

Even from these unpromising calculations, then, we can deduce that a 9pm watershed is likely to be effective – especially for a single intervention. It also has strong public support and, in my view, is unlikely to seriously affect to advertising revenues.

The Government has made the right call.
The already complex job of working out how to help different people in different circumstances is complicated by one of the fundamental questions of political philosophy: what role should the state play in the private lives of its citizens?

Libertarians and public health campaigners have fought a running battle for years over this question. But when it comes to diet, even fierce opponents of the “nanny state” now recognise that the problem is serious enough to warrant greater state intervention.

The journalist and former Tory MP Matthew Parris wrote about this in his column in The Times last year. “Haven’t we a right to self-harm?” he mused. “Is it the business of the state to stop people hurting themselves? Individual liberty matters, and we risk numbing that most useful instinct: our sense of responsibility for our own fate.” Parris listed a number of state interventions he had opposed in the past: the compulsory wearing of crash helmets and seat belts, the smoking ban, the sugar tax, and prohibitions on alcohol and tobacco advertising. He concluded that he had been wrong on every count.

“Society is a web,” he continued. “Each gossamer thread is attached to others, and to the whole… People want all kinds of things from the state. It follows that the state wants all kinds of things from the people, including that they don’t smoke or eat themselves to death… I do not entirely repent of my youthful libertarianism,” he continued. “Unless rebuked, nanny will get too big for her boots. But I believed once that there was no need for nannies. I no longer believe that.”

As I travelled the country collecting evidence for this strategy, I talked to everyone from farmers to food bank clients to factory workers about what role they felt the state should play in helping them eat a better diet. Our team also organised more formal “public dialogues”, with participants randomly selected from all parts of society.

The vast majority of those we spoke to (and almost every parent) said they were fed up with being bombarded by junk food marketing and thought the state should intervene. When we asked what form that intervention should take, most said they were comfortable with the idea of restricting advertising for junk food. A recent Savanta ComRes poll identified a similar mood, with 74% saying they would like a ban on advertising junk food before 9pm on TV and online. 72% would like shops to be prevented from displaying unhealthy snacks next to checkouts and entrances, and 62% want limits on volume-based promotions for unhealthy foods.

It seems clear that the state has the moral authority to intervene in people’s lives to help them eat better, especially given the terrible costs that diet-related disease imposes on our society. Several surveys undertaken since the outbreak of COVID-19 show that people want the Government to take stronger measures to tackle the obesity crisis and improve the nation’s health.

But it remains the case that what we eat is a personal choice and we experience it as a private freedom rather than a collective duty. Government interventions will only be effective if they have been decided carefully in consultation with citizens, rather than being unilaterally imposed upon them.
I believed once that there was no need for nannies, I no longer believe that.
What else might work?†

Battling through the forest of studies on dietary health and Government initiatives, one thing soon becomes clear: it is extremely hard ever to be certain that intervention X leads to outcome Y. Dietary health is simply too big and complex an issue to be measurable in certainties.

So how do you go about changing things? One approach is to pull lots of levers at the same time and hope for the best. The other is to pull one lever at a time and see what works. If it doesn’t work, drop it. The problem with the latter method is that societal change does not work like a sausage machine: inputs followed by outputs. It’s more like an ecology. The success of any single policy might depend on how and when it is implemented and how it interacts with other policies. Human beings are complicated and often react in unpredictable ways.

Over the past 30 years, there has been much emphasis on the importance of “evidence-based policy making”. This sounds eminently sensible; indeed, you might think it the minimum one should strive for. But it has given birth to a new science of “policy evaluation”, which may actually lead to cowardice in policy making.

You can’t always find evidence to support a single policy. An evaluation of one intervention in a huge and complex food system might conclude that the intervention has no effect, because the effect is too small to measure. But the effect is still there, and if you press on with all the little things together, you might end up with a big effect.

There are sceptics, for example, who point out that the sugar tax has not yet produced any directly measurable reduction in obesity. But it has led to large scale reformulation of soft drink recipes, taking 45,000 tonnes of sugar out of our annual consumption from soft drinks. Given time, and in combination with other anti-obesity strategies, that could snowball into something eminently measurable.

The other problem with evidence-based policy making is that it creates a Catch-22. You can’t bring in a policy until you have the evidence to show it works, but you can’t get the evidence without first introducing the policy. In the absence of data, it’s all too easy to end up doing nothing rather than risk unintended consequences.

In the private sector, lack of certainty is overcome by a lot of trial and error. You go with your instinct about what might work, supported by as much evidence as you can find and, if it doesn’t work, you try something else. But you have to be brave. You have to act.

Perhaps a better model for state intervention would be “evidence-informed policy making”. That is – introduce policies where you can anticipate the likely effects and where the existing evidence suggests they will not be harmful. And build into this policy methods for continuous monitoring and improvement.

This is something I discussed with Pekka Puska, then director of the National Institute of Public Health in Helsinki, when I was working on the School Food Plan for Government in 2013.87

Forty years ago, Finland was one of the world’s unhealthiest nations. Diet was poor and rates of smoking were astronomical. “In the 1970s, we held the world record for heart disease,” he told me.

Puska – then in his mid-twenties, and freshly graduated from medical school – had an instinctive sense that this epidemic of ill-health had to be tackled at its cultural roots. In 1972, he started an experimental project in the eastern region of Finland, the Province of North Karelia, where one in ten people of working age were on disability benefits due to diseased arteries.

There was very little evidence for what interventions might work. “We decided you have to do as many of the things that might work at the same time. You need to get stuck in. Get your boots deep in the mud,” Puska told me. “The whole environment had to change: The food industry, restaurants, cafeterias, supermarkets. We had to make sure that the healthy choices became the easy choices.”

Puska and his team set up lots of different initiatives. They gave free, traction shoe clamps to the elderly so they could walk in winter. They increased the number of bike paths and created safe, well-lit cross-country ski paths. They worked with local food industries, including sausage manufacturers, to reduce fat and salt levels. They improved the food and education in schools. They even created an X-Factor-style TV show where Finns competed to see who was healthiest.

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of Finland. Average life expectancy rose by seven years for men and six years for women.

Any attempt to solve the huge problem of diet-related disease in this country will require multiple, simultaneous interventions at scale, every bit as ambitious as Puska’s vision for North Karelia.

Recommendations already adopted by Government

I am delighted to welcome the commitments the Government has made in the new Obesity Strategy.

- Legislating to end the promotion of foods high in fat, sugar or salt (HFSS) by restricting volume promotions such as buy one get one free, and the placement of these foods in prominent locations intended to encourage purchasing, both online and in physical stores in England.
- Banning the advertising of HFSS products being shown on TV and online before 9pm and holding a short consultation as soon as possible on how we introduce a total HFSS advertising restriction online.

The other measures proposed by the Government include (in their words):

- Introducing a new campaign – a call to action for everyone who is overweight - to take steps to move towards a healthier weight, with evidence-based tools and apps with advice on how to lose weight and keep it off.
- Working to expand weight management services available through the NHS, so more people get the support they need to lose weight.
- Publishing a four-nation public consultation to gather views and evidence on our current “traffic light” label to help people make healthy food choices.
- Introducing legislation to require large out-of-home food businesses, including restaurants, cafes and takeaways with more than 250 employees, to add calorie labels to the food they sell.
- Consulting on our intention to make companies provide calorie labelling on alcohol.

I welcome the Government’s invitation to consider ways to improve public sector procurement of food and drink. This is long overdue. In Part Two, I will include a comprehensive recommendation on what the Government can do to ensure that the food it pays for directly – for example in schools, hospitals, prisons and in government offices – is both healthy and sustainable.

This is only a start

In Part Two of the National Food Strategy, I will consider what a systemic intervention in the food system might look like. I will also attempt to navigate a clearer understanding between the state and citizens about how the state should intervene to improve our eating habits.

The National Food Strategy team was planning to do this using a formal Citizens’ Assembly, but that requires a large number of participants (typically around 100) to be present at the same time. The current rules about social distancing make it impossible to do that in person, and our experiences of large-scale video conferences have persuaded us that it wouldn’t work online.

Instead, we are exploring options to hold smaller deliberative public engagements with citizens selected to reflect the demographics of the country. We will bring politicians and representatives from the food industry into some of these discussions and cover a wide array of food policy issues – touching on climate change, the environment and health and examining the philosophical questions raised by Matthew Parris. We will set out our methodology in the autumn.

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1 Thanks to Michael Kenny, Director of the Institute of Public Policy, Cambridge University, for his help in developing this thinking.