

# What if calories didn't count?

In a new series on nutritional poverty, this piece looks at why we care about calories so much. **Imogen Hope** examines how a unit of energy has taken on such prominence in our understanding of health and has become more of a measurement of self-worth than nutritional value.

Counting calories can be a balancing act  
PHOTOGRAPH: SHUTTERSTOCK



How many calories should I eat in a day? It seems a simple enough question but depending on whom you ask you will get a multitude of different answers. Popular calorie tracking app My Fitness Pal has been well known for citing as low as 1,200 calories as the right daily amount, while the NHS will tell you it's 2,000 a day for women, 2,500 for men. Factors like height, age and gender may be brought into consideration, depending on the calculator, as well as how active a lifestyle you lead.

On the surface this seems simple enough; calculate the calories you consume from the food you eat, and you will lead a healthy life and stay within your recommended weight range. The

golden rule of calories has long been at the heart of nutrition-related policy-making, but with everyone from eating disorder sufferers to epidemiologists denouncing calorie counting, its reputation is beginning to tarnish.

As of April 2022, every restaurant with more than 250 employees must put the calorie amounts for every food item on their menus, with a risk of £2,500 fines if they fail to do so. The purpose of this is to help tackle the obesity epidemic in this country and make us more aware of what we are eating. Calories have been on menus in the US since 2018. Data from PLOS Med shows that there has been a fall in the number of calories people consume in restaurants by around 4 per cent, with a significant fall in the immediate aftermath of the policy being introduced.

This data might sound like a step in the right direction, but it is too early to see any evidence of long-term change. For the poorest 20 per cent in society, who are twice as likely to be obese, the calories on menus make very little impact. And for the minority with eating disorders, the

## Calories are blind to the nutritional content of the food.

visibility of a number which is so easy to count and fixate on can be extremely damaging. The minor benefits of such policies do not outweigh the damage caused to some and the neglect of others. In the battle against obesity, there surely must be a better way.

“Since the turn of the 19th century, we’ve regarded calories as the key to weight loss. Not just the general public and the press, but the governments and medicine too,” says Louise Foxcroft, food historian. She suggests that the fixation on calories by policymakers is due to their ease as an amount attached to all foods. “Trying to make society healthier by suggesting 5-a-day, or 10,000 steps, 14 units of alcohol is ridiculous,” she says. “It’s all measured and laid out for us, it’s all spurious, but it doesn’t frighten anybody.”

The nature of calories as an easy number, a universal measure to attach to all foods, means that they are not a good measure of the nutritional values of different food items. “Calories in different food behave very differently inside the body,” Foxcroft explains. “So, 300 calories of cake are very different to 300 calories of carrot. You can’t just skip the cake and have 300 calories of carrot.”

You probably haven’t heard of Wilber Atwater. Like a lot of scientists, his name is not as widely recognised as those of movie stars, sportsmen and women or even politicians. But he has had a far larger impact on your life than you realise because Atwater was the chemist and scientist whose work on energy requirements for the human body popularised the use of the calorie.

Atwater laid the foundation for calorie counting in today’s diet culture, calculating 2,300 per day for women, 2,830 for men. Even at this early inception of calorie counting, Atwater was already attaching morality to the energy values he had calculated. He often wrote about the moral failings of gluttony and eating beyond the daily calorie requirements, despite many reports suggesting he was overweight himself.

Dr Giles Yeo, an epidemiologist at the University of Cambridge, thinks calories have limited application in their use for the public. “What calories are very good at giving you the amount of food,” he says. “Two hundred calories of chips are twice the portion of 100 calories of chips, obviously. But you could also use grams, and you’re not going to try and compare 200 grams of chips to 200 grams of carrots. It’s just too blunt a tool because calories are blind to the nutritional content of the food.”

Calorie counting may be a blunt tool, but it is one that can cut deep, as Julia Falaguerra found out. She started calorie counting as a method of trying to lose weight when, at 14 years old, family members made comments about how much she weighed. “I was doing all these calorie restricting behaviours in front of my mum, and she just thought I was healthy. She didn’t really see any concern there,” she says.

This is one of the problems with the prevalence of calories – the perception of counting as healthy can lead to disordered behaviours being overlooked. Having calorie amounts available worsened her eating disorder, Ms Falaguerra says: “I was so obsessed with calorie counting, so I could write down the exact calories in my log. It was helpful to me in maintaining my disorder, at the time I thought it was great that I could see what I was putting in my body.” It got so bad she would even keep track of the calories in her chewing

gum.

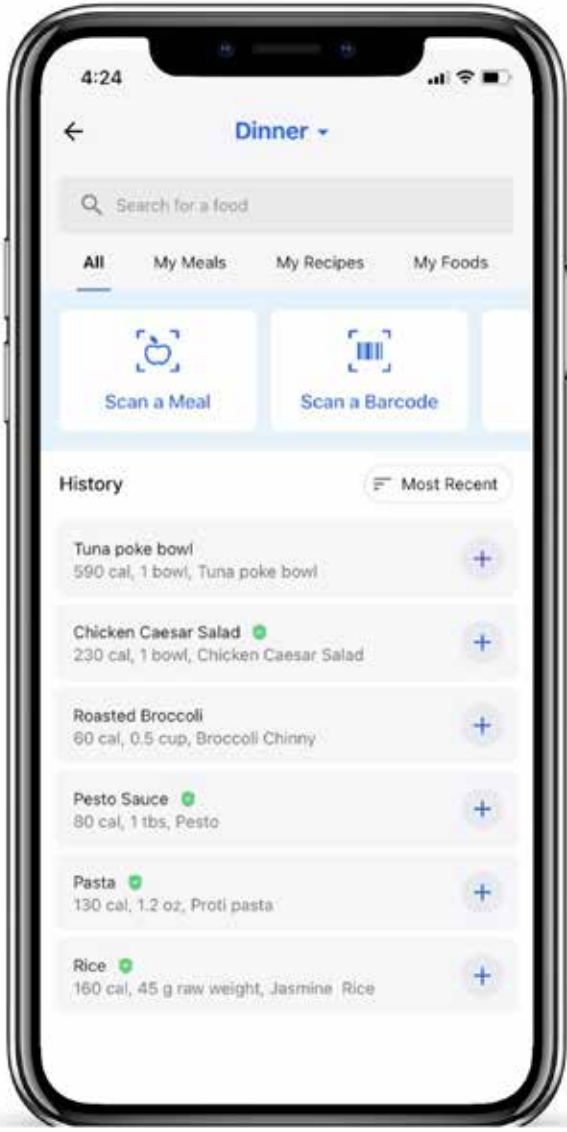
So what are the alternatives? There is a double aged sword to calories which makes them so dangerously alluring to some, whilst effective for others: they are simple. Calories are nice, round, universal numbers which are easy to communicate and understand. It would certainly require a lot of societal change to move away from calories as a tool of diet culture, but Dr Yeo thinks there are alternatives to calories in policy-making which would place more emphasis on nutrition rather than quantity. He suggests adapting the front-of-pack traffic light system that currently shows the amount of salt, sugars, saturates and fat a product contains per serving, as well as the energy in calories. These are colour-coded – red, amber, or green – depending on how high the amount.

“I would keep to the traffic light system, because green, amber, red, we understand what that is, but rework it to reflect the quality of the food,” Dr Yeo says. There is a chance that a new set of nutritional facts would still be difficult for some. But by removing emphasis from the “very specific number” of calories, Dr Yeo thinks it would not only provide more rounded nutritional information but be less easy to fixate on. “The calorie is such an easy number to understand or to assume that you understand. It is more difficult to count a composite figure,” he continues. “To my mind, part of the problem is having one, simple, single figure. You can count a composite quality of your diet, rather than the amount.” A new system would focus more on the quality of food consumed, rather than the number of calories.

Putting calories on menus might work, at least in the short-term. But a policy focus on calories seems unlikely to impact obesity rates as it will fail to reach those who need the most help in managing their weight – the poorest in society. Factors like household income or postcode are not often taken into consideration by the likes of My Fitness Pal. And yet those are the factors which have the most impact on calorie consumption.

How many calories should I eat in a day? “It is very hard to unlearn,” says Julia Falaguerra. Nearly 10 years have passed since the day she was made to feel that she needed to lose weight, despite being an entirely healthy size. Calorie counting became her weapon of choice in restricting her diet, allowing her to fixate on the amount of food she was putting into her body – something she still struggles with to this day.

Calories are not only, as Dr Yeo puts it, “too blunt a tool” in measuring nutrition, but they have a sense of morality ingrained in them which is impossible to extrapolate. To combat obesity a better tool is needed to assess nutritional value. As the battle against obesity continues, policymakers need to move away from calories and make their decisions count.



My Fitness Pal helps users track the calorie amount in different meals



# Chasing choice: when it comes to food is there too much on the menu?

Individual choice is an important factor in nutritional poverty. In our ongoing series, **Imogen Hope** discovers how placing the onus on individuals for their food choices is often misplaced. In a world where people are overwhelmed with options, do they really have the freedom to choose?

We all know that smell. Walking down the street, minding your own business, when you get the irresistible, unrivalled wafting: someone, somewhere, is frying something. Has it crossed your mind already to skip the sensible dinner you planned to cook in favour of some fast food, battered, fried, crispy, hot and delicious? We all deserve a treat, after all. Don’t we?

Scott Jobling gets fast food up to four times a week. Whether it’s a McDonald’s breakfast, a Chinese takeaway or fish and chips from his brother-in-law’s chippy, he finds it hard to resist. A civil enforcement officer in Berwick-upon-Tweed, Jobling says: “In my town, we’ve got a pizza shop, four or five Chinese takeaways, and two Indian takeaways. We’ve already got a McDonald’s and we’re just about to get a KFC. It’s a lot considering it is only 4 miles from one side of town to the other.”

The UK has had the highest obesity rates in Europe since 2010, and they are not going down any time soon. Predictions indicate that by 2040, 36 per cent of adults will be obese, and this rises to

46 per cent in the most deprived areas. There is clearly a problem with what we eat in this country, and everyone from Mr Motivator to the Prime Minister would have you believe that it is your own fault. If you only ate a little less and moved a little more. If you had the willpower to walk past the chip shop and eat a salad for dinner. If you made an effort to lovingly prepare veggie-filled meals for your children instead of feeding them the much cheaper alternative of fish fingers. Then maybe this problem would be over. But what if the problem of our ever-expanding waistbands is not, or at least not entirely, our fault?

“About 15 years ago, a lot of the dialogue around disparities and nutrition were centred on knowledge and motivation,” says Dr Pablo Monsivais, an associate professor in dietary public health at Washington State University. “So, the presumption was that people just didn’t know better. And they were making less healthy food choices because they just lacked knowledge. Or maybe they had some knowledge, but they weren’t quite motivated enough,” he says. Dr Monsivais, who has conducted extensive research into the economics of healthy eating, says whilst attitudes have changed in the academic community, there is still too much emphasis on individuals rather than using public policy to change attitudes.

“In other areas of public health this



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In many places, takeaways make up 80 per cent of food outlets. That’s not really a choice.

movement happened much sooner, like with getting people to stop smoking,” he says. “It wasn’t just ‘let’s tell people how unhealthy smoking is’. We took smoking away from advertising, we took it out of the pubs and restaurants and suddenly it became almost taboo.” And it is certainly true that there is a lot of morality attached to obesity compared to other diseases. Factors in diet culture have led people to believe that what is essentially another form of malnutrition is a personal or even moral failure on the part of the individual. As Dr Monsivais puts it: “You wouldn’t say to someone who’s underweight and has rickets ‘it’s your own damn fault’.”

So, why is our government so hesitant to make policy interventions to limit our

Some communities are overwhelmed with the number of fast-food outlets  
PHOTOGRAPH: SHUTTERSTOCK

access to fast food and take responsibility for nutrition? In May 2022 the government performed a screeching U-turn on policies made to tackle obesity; the banning of fast-food advertising before 9pm and buy-one-get-one-free deals on junk food. “They don’t want to frighten the horses,” says food historian Louise Foxcroft. “If they suddenly got quite radical, they’ll have the food industry on their backs, they’ll have people going I’m not eating that it’s rabbit food. They don’t want to frighten the electorate.”

“Choice and convenience, that’s what we’ve got used to and that’s what we think is our right. But we’ve got these so recently,” Ms Foxcroft says. There is evidence that government intervention could redress the balance of nutritional disparities in the UK. After all, the most nutritionally equal our population has ever been was in the aftermath of the Second World War. In 1954, after 14 years of rationing, where everyone was given the same amounts of calories, protein and fats regardless of income or social class, the nutritional disparities of the 1930s – and here we are talking about rickets rather than obesity – had disappeared. And whilst no one is suggesting, nor should they be, that rationing food is the answer, it does introduce interesting questions about why the government is so hesitant to take some responsibility for the health inequalities in its population.

Dr Thomas Burgoine, a senior research associate at the University of Cambridge, uses quantitative methods to study neighbourhood food environments and their impact on dietary behaviours. In other words, he looks at how where we live influences what we eat. “We know that people are eating fast food about three or four times a week. It’s not a treat,” he says. “If it was, there would be no problem.” According to Dr Burgoine’s research, when people live in areas surrounded by fast food their senses are overwhelmed, and what they think of as a ‘special treat’ becomes a little less special. “If the unhealthy option is the easy option, it’s going to be the option that they roll with. The point is, they’re not choosing it. It becomes the default behaviour when it’s just so easy and accessible.”

While the government does need to enact policy which takes the onus away



from individuals, we also need to address education surrounding food. A self-generated survey showed that only 6 per cent of participants knew that avocados are a better source of potassium than bananas. A surprising 77 per cent made the wrong choice when deciding which is the least sugary snack between a carton of raisins, a slice of malt loaf and a chocolate digestive biscuit. The biscuit contains the least sugar of the three, with raisins containing such high levels that dentists have launched a campaign against them.

The National Food Strategy has made several recommendations to introduce food education back into schools, including a food GCSE qualification, as well as the introduction of more sensory food exposure in the early years to reduce the number of food aversions in children. The government response to these recommendations has been pushed back by six months and has been released in the middle of June after a draft of the white paper was leaked. The food strategy outlined by the government has been accused of ignoring the majority of the recommendations from The National Food Strategy report.

Dr Bugoiné suggests that choice should, at least to some extent, be eliminated. “The proportion of what’s available to us is more and more becoming fast food, we just become swamped with unhealthy options. And it’s affecting neighbourhoods in deprived areas more than affluent

Obesity rates in the UK are the highest in Europe  
PHOTOGRAPH: SHUTTERSTOCK

areas. The crazy thing is it’s really hard to do something about it because you can’t get rid of them when they’re there.” He proposes using local planning as a way of reducing the number of takeaways on high streets. So when you are walking home, you might not pass a kebab shop and be tempted in.

There is no doubt that healthy food needs to be widely available and at a low price point. It should not only be affordable for the few, but for everyone. But reducing the amount of unhealthy food accessible at such a low price point must be a part of redressing the balance. “In many places, takeaways make up more than 80 per cent of the food outlets in a community. And that’s not really a choice. Part of what public health intervention can do is empower or enable choice,” says Dr Monsivais. “You can at least create the conditions where those choices become more feasible.”

Public health intervention would help Scott Jobling and those like him, who get fast food because it tastes good, but also because it is overwhelmingly available. “The words ‘let’s get a takeaway’ are just so exciting,” Jobling explains. “I was trying to do a health kick, and it lasted about two days. Life got in the way, and I just went back to eating rubbish.”

