

The economics of calorie labelling suggests the policy won't work

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September 7, 2018

Another day, another brain-wave emanates from our public health overlords in government. This week we learn the Conservatives are planning to mandate that all restaurants, cafes and fast-food outlets publish calorie counts for menus to help combat obesity.

Theory and evidence suggests this latest fad will barely dent calorie intake or obesity levels. It will though impose disproportionate costs on independent, local, small and micro businesses with regularly changing or seasonal menus. But who cares about pesky economics or business activity when nannying is the order of the day?

Inspired by insights from behavioural economics, the case for action may seem innocuous. Many of us desire to lose weight. Yet we have what economists call "time-inconsistent preferences". We value the immediate satisfaction of a meal, discounting too heavily our "real" preference for good lifetime health.

Providing information about what we eat then is surely a harmless means of improving understanding of calories and increasing our sensitivity to ordering calorie-heavy meals. We can be simultaneously educated and shamed, opting for low-calorie options to facilitate weight loss. If restaurants respond to this adjusted demand by making meals less calorific generally, these benefits will be larger still.

A simple illustrative model analysing how calorie count labelling translates into weight loss shows why this effect will be tiny. For calorie menu labels to make a difference, four things must happen. First, consumers must see and read them. Second, they must understand the implications in relation to how much they "should" be eating, given exercise habits. Third, they must adjust their meal choices to reduce calories. Fourth, they must not adjust any of their other food intake or exercise choices to compensate.

Even if we assume, totally unrealistically, that the probability of each stage occurring were independent and as large as 50pc, this implies just 6.25pc of people who eat at restaurants, cafes or fast food outlets would lower their overall calorie intake. At a 25pc probability for each stage, this would fall to just 0.39pc of customers. Given people say they average eating out only around twice per week, the overall fall in calories resulting even from this small number of people adjusting would be a tiny proportion of total intake.

Indicative evidence suggests as much. Obesity has risen in an age where nutrition information is more broadly available than ever, especially on supermarket-bought goods. Either consumers ignore it, or else other lifestyle factors are clearly more important. Evidence shows that when eating out customers care mostly about convenience, price and taste. In New York, where labelling was introduced in 2008, academic research shows too that the public salience of calorie counts diminishes over time. Certain American cities have long had these laws and the federal government has recently imposed a calorie information mandate on chain restaurants with 20 or more locations across the country. The evidence from these policies is mixed, but results range from very small reductions in calories to no effect whatsoever.

Studies on New York and King County Washington's laws found no change at all in calorie intake. A 2015 overview of all empirical work undertaken in this area found that, on average, labelling reduced calories per meal by 18. Restricting analysis to the more carefully controlled studies though suggested an even smaller, insignificant decline of just 8 calories. Whichever you prefer, these results represent 0.01pc and 0.004pc of a woman's recommended daily intake respectively.

Sure, this hides lots of variation according to type of restaurant and demographic groups considered. But this cuts both ways. One research paper even found that providing calorie information increased the calorie intake of dieters in a New York burger restaurant. They entered with inflated expectations of calories contained within the food, and were pleasantly surprised!

Perhaps the most favourable evidence for the policy has come since the roll out of the US federal mandate. One experiment tracking two full-service restaurants found labelling reduced calorie intake by 3pc through people opting for lower-calorie appetisers and main meals (though not drinks and desserts).

But even if we assume this level of impact here, and generously suppose people eat out three times a week for 1,500 calorie meals each time, this translates to weekly calorie intake falling by 135 calories. A mere 0.01pc of a woman's recommended weekly intake. For guidance, health experts suggest you need to run a 500-calorie deficit each day for a week to lose one pound of weight.

Some might say, even if it only helps tame calorie consumption modestly and for certain groups, isn't it worth it? Well, maybe. But there are undoubted costs too. These are disproportionately borne by certain businesses and their customers, as Liz Truss, chief secretary to the Treasury, has warned. Updating menus is modestly expensive for most food outlets, and introducing new items would now require that these are reprinted, potentially reducing menu innovation. There are one-off costs to going through and calculating the calorie estimates themselves too. Not to mention the constant threat of litigation for inaccuracies.

All these burdens might be easily absorbable for big fast-food chains, selling the same dishes in standardised sizes every day. But independent restaurants, pubs and cafes that regularly change their menu would find it very expensive. Those not operating standard serving sizes would find it near impossible. This is presumably why the US federal government exempts all except major chain restaurants.

Yet if one excludes most restaurants, pubs and cafes then even the very modest benefits outlined above become smaller still. It's difficult not to conclude the whole idea will cause a lot of fuss for little overall gain.

If only the Government had other pressing concerns.

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