

The rise of veganism and its impact on spending on meat

The trend towards veganism is clear. In July 2019, the vegan food manufacturer Beyond Meat had a market value of almost \$12bn. There were around five times more Google searches about veganism in November than four years earlier. Prominent brands such as Greggs, Subway and Burger King have launched vegan versions of their flagship products. As the buzz around veganism grows, are people really spending less money on meat? And if the meat industry is dying, who's killing it?

Surveying the scene

We have analysed the UK Living Costs and Food Survey (LCFS), a dataset that shows how households spend their money, broken down by age, income and region. The survey can tell us how much different types of people spend on meat and, by implication, it can shed light on which groups are trending towards a vegan, vegetarian or a "flexitarian" lifestyle.

There are a couple of drawbacks to this data:

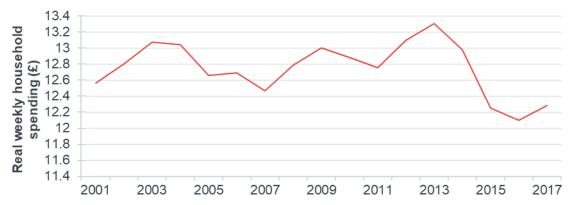
- One shortcoming is that it tells us only about expenditure and not about prices. So we can't
 distinguish whether people are buying more meat or whether it is costing more.
- Nor can we identify what people are eating instead of meat. So a drop in meat consumption may not necessarily equate to increasing vegetarianism. For example, people may be spending more on eating out or on takeaways.

Mincing the data

What does the data tell us about overall meat spending? At a high level, expenditure on meat products has been declining. Between 2001 and 2013 meat made up between 3.4% and 3.7% of a household's typical weekly spending. But by 2017 it had fallen to almost 3.2%. Given growing interest in veganism, the figure is likely to have dropped further since then.

¹ No animals, or economists, were harmed in the writing of this report.

Weekly UK real spending on meat per year (£)



The fall in meat consumption is not to be ignored. Expenditure on meat dropped, on average, by almost 10% between 2013 and 2016. That means households were spending £1 less per week on meat in 2016 than in 2013. Given that there are over 30m households in the UK, that's a significant sum. To understand what this means for the meat industry (and others in the food sector), we need to find out more about who is switching away from meat and who is still tucking in.

Who is the typical vegan?

Economists like to have some prior expectations about what the data might tell us. While resisting stereotypes, our hypothesis is that a typical vegan (or at least a person consuming fewer animal products) is likely to be a millennial on high earnings living in a big city. This is someone free of ingrained shopping habits formed over a number of years who can afford to try meatless food alternatives and who has a variety of convenient options nearby.

Using the LCFS, we can test this hypothesis by looking at meat expenditure by age, income and region. Our prior expectations turned out to be broadly correct, but the data nevertheless revealed some surprising results:

- Young people did tend to eat less meat. But they were primarily "Generation Z" 18- to 24-year-olds. Millennials, those in the 25-35 age group, did not change their meat consumption over time. Older people, especially those over 50, also showed a small but steady decrease in meat consumption.
- High earners spend the largest proportion of their income on meat, and their expenditure levels have barely changed since 2011. Over the same period, the lowest-income groups have reduced their spending on meat by, on average, 2% per year. Interestingly, the second-highest income group spent almost 4% a year less on meat than in 2011.
- Meat expenditure is falling significantly in London, by far the most densely populated region in our dataset. The other densely populated regions (North West, West Midlands, and South East) have also spent less on meat in recent years. Spending on meat has remained constant in more sparsely populated regions like Wales and Northern Ireland. A slight anomaly is Scotland, which is the least densely populated part of the UK but has been cutting back on meat spending.

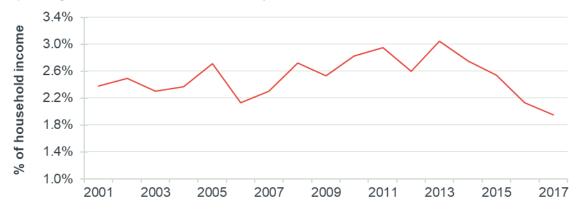
Below, we assess each demographic type in turn and explore some of the trends in greater detail.

1. Is it the Millennials?

The received wisdom about veganism is that it is millennials who are abandoning meat for avocado on toast. Does the data bear out this assumption?

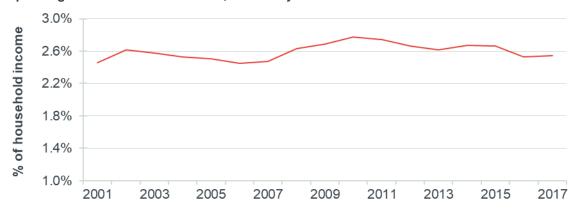
Young people are definitely spending less on meat. But peel back the layers and there's a more interesting story: it's not millennials who are driving the vegan trend, it's the so-called Gen Z. These 18- to 24-year-olds have reduced their outlays on meat quite substantially since 2013. In 2017, they spent less than 2% of their income on meat – the lowest proportion of any age group this century.

Spending on meat, % of income, 18- to 24-year-olds



So what about the millennials, the 25-35 age group? Strikingly, they have not changed their habits in recent years. In fact, the proportion of their total spending on meat has been roughly constant at just over 2.5% of income since 2001; their real spending has also remained fairly steady.

Spending on meat as a % of income, 25- to 35-year-olds



Given that overall meat expenditure is shrinking, who is responsible? The broad answer is basically everybody apart from millennials. For example, from 2012 to 2016:

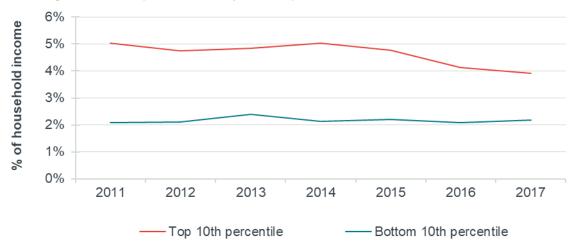
- 36- to 49-year-olds reduced spending on meat by an average of 1% a year;
- 50- to 64-year-olds by an average of 2.5% a year;
- 65- to 74-year-olds by an average of over 3% a year; and
- Those aged 75 and over by an average of 2.5% a year.

In other words, it's not millennials who are spending less on meat. Rather, it is the youngest and oldest people in society who are driving the decrease in meat consumption.

2. Is it the Rich?

As a proportion of income, it appears that the rich are spending less on meat. In 2011, the top 10% of earners spent around 5% of their income on meat. By 2017, the figure was below 4%.

Percentage of income spent on meat by income percentile



However, in real terms, things look different. We find that households in the top deciles of the income distribution – not only the highest earners - consistently spend the most on meat. In short, the richer you are, the more you splash out on meat. And while spending on meat by wealthier households has indeed fallen from peak levels, this trend is more broadly based.

On average, the bottom 30% of households by income have cut spending on meat by over 2% per year since 2011. Compare this to the top 10% of households, who have barely changed their expenditure over the same period. The picture in the middle of the income distribution is more mixed. Interestingly, the second-highest earners have spent almost 4% a year less on meat since 2011 – by far the largest reduction of any income group. These are the households directly below the top 10% of earners: an almost perfect storm of affluence.

Weekly real spending on meat by income percentile (£)



3. Is it a London-centric/urban trend?

As outlined above, we hypothesise that falling meat consumption is concentrated in metropolitan areas, where there is likely to be a wider variety of non-meat options than in rural parts of the country. As London is by far the largest city in the UK, analysing trends in the capital might inform us about meat consumption in urban areas more broadly.

The data backs up our hypothesis more than it did in the case of our assumptions about the habits of millennials and the well-off. Over the four years from 2013 to 2017, spending on meat in London as a proportion of household expenditure slumped by more than 20%.

Percentage of income spent on meat in London



London is by far the most densely populated region of the UK, according to the ONS, followed by the North West, South East and West Midlands. Tellingly, spending on meat in each of these three parts of the country fell by around 10% from 2012 to 2017.

Percentage of income spent on meat in densely populated regions



The most rural parts of the UK are Scotland, Wales and Northern Ireland, according to the ONS. While meat consumption has barely changed in Northern Ireland in recent years, it has fallen slightly in Wales and significantly in Scotland. It would be instructive to analyse urban versus rural households, but that is beyond the scope of our dataset.

Despite the incomplete nature of the data, the evidence is conclusive: slowly but surely, the UK is consuming less meat. Our reputation as a nation of meat eaters is such that the French still teasingly call us "les rosbifs". How long will it be before we're better known as "les veggie burgers"?