

Meat analogues in the EU: A cut above the rest?

Blog post by Research Associate Mollie Brennan, 8 April 2019

First it was tofu, then it was quorn, and now meat derived from a single animal cell and thus the creation of a new term - meat analogue. The meat analogue industry is one of the fastest growing consumer goods segments. It is also one of increasing political volatility and one in which regulation is struggling to keep up in a way that spurs innovation and shifts consumer behaviour. As this debate evolves, the EU's commitment to upholding the highest health and safety standards may come into conflict with the bloc's mandate for global leadership in health and environmental standards.

There are an increasing number of organisations and scientists who have voiced support for reducing meat consumption to tackle growing health issues associated with particularly red and processed meats, and the environmental impacts associated with the livestock sector. From lab grown 'cultured' meats to plant-based proteins the industry is projected to be worth \$6.43 bn by 2023 (up from \$4.63 bn in 2018). In the US, a number of players, backed by investors and billionaires, are tussling for the hot spot, while China is driving its own innovation in order to meet a target of 50% meat reduction by 2030.

Despite moving closer into the mainstream, the issue remains highly contentious, in part because of the deep root that food has in culture and tradition. In the US the issue has split Democrats and Republicans with advisor to Donald Trump, Sebastian Gorka, likening Alexandria Ocasio-Cortez's Green New Deal as 'trying to take away your hamburgers' – in the way that dictator Josef Stalin 'once dreamt of'. In the UK, Green Party MP, Caroline Lucas' calls for a meat tax were met with outrage, and the UK's Minister of State for Energy and Clean Growth, Claire Perry, has called the suggestion of it 'the worst sort of nanny state ever'.

The issue of meat analogues and how to regulate them is coming under increasing focus in the EU. This has been seen most recently in labelling, with the European Court of Justice stripping the term 'milk' from soya and nut drinks in 2017 to minimise customer confusion over their comparative nutritional content. On Wednesday, the EU agricultural committee proposed a similar change in labelling regulations to ringfence terms associated with meat products, such as burger and sausage, aiming to exclude their use by meat alternatives. As with plant-based 'milks', the move has been seen to hinder consumer acceptance, and for opponents, it has drawn attention to the political clout defending more established meat and dairy industries.

Second, is a more ideological issue around the use of technology, and particularly Genetically Modified Organisms. Last year the EU ruled that gene-edited crops, such as heme (the genetically engineered soy used to give Impossible Foods' burgers the same texture and ability to bleed as a meat burger) should be subject to the same stringent regulation as genetically modified products. Heme, or soy leghemoglobin, is developed through a precision genome editing technology called CRISPR, with capabilities which span beyond bleeding plant burgers to more controversial practices such as editing human embryos to manage hereditary diseases. Ensuring regulation remains agile to

discern between the use of a technology, and not put potential customers off, will be key in ensuring the opportunities it presents are not missed.

Differences in how these issues are being regulated will drive the market's geographical growth. Political opposition to GM products remains strong in the EU, whereas Canada and the US have taken a more lenient approach. Despite initial concerns, the Food and Drug Administration (FDA) cleared heme as safe to consume in 2018 and as of last week, Burger King began trials of Impossible Foods in the US. As the market and demands continues to grow, the EU will need to renew its approach to regulating these issues if it wants to remain competitive.

It appears that something has to give, and the question remains as to whether the EU will be able to marry its commitments to health and safety standards whilst driving innovation to the advantage of the environment and health. This discussion will be particularly pertinent within the next policy cycle, in which reform of the Common Agricultural Policy will provide a key entry point for those landing calls for better incentives for farmers to move from animal production towards agricultural practices with a lower environmental impact.