

This week we were subjected to a piece of biotech propaganda from the Hon. David Seymour MP, leader of the ACT Party and soon to be Deputy Prime Minister. Dressed in a white coat Seymour spoke to us as he was visiting Ruminant Biotech.



He held up a bolus (or pill) the size of a potato and announced that once put in a cow it would release a *very special and secret synthesised compound* that reduces the cow's methane emissions by 75%. The bolus is a slow release pill that continues to work for six months. Seymour described this as a real win-win because we can keep having steaks and dairy products and not worry about climate change. He finished with *"science is awesome and the real solution to our climate challenges"*.

The project has received \$7.8 million of funding via the New Zealand government body AgriZeroNZ and it is envisioned that approval for on-farm use in New Zealand's massive dairy industry will be fast tracked to begin shortly in 2025. Veganism has never looked more attractive.

A cow's digestive system contains a complex stomach with four chambers, each with their own unique function. The four compartments allow ruminant animals to digest grass or vegetation without completely chewing it first. Instead, they only partially chew the vegetation, then naturally occurring microorganisms in the rumen section of the stomach break down the rest. In cattle and dairy cows, the development, pH balance, functionality and bacteria levels of the digestive system are crucial to maintaining overall health and high yield.

The complex digestive system of cows enables them to produce one of the most highly prized and pure sources of nutrition on the planet. When a very special and secret synthesised compound is introduced into such a system, the milk and meat is presumably not going to remain completely unchanged, nor for that matter is animal health, the other end product of cow digestion, going to be completely unaffected. The secrecy surrounding the nature of the intervention leaves these questions unaddressed.

The for-profit biotech start up, Ruminant Biotech, describes the secret ingredient as a 'synthesised natural organic compound' which is about as close to an oxymoron that you can get. Biotechnology synthesis always produces a product which differs in some biomolecular characteristics such as shape and chemical composition. Moreover its manufacture in bioreactors is accomplished using genetic accelerators which invariably end up as contaminants in the final product in one form or another.

The point that Seymour missed is the rapid growth in cancers and ill health among the young as our staple foods contain more and more additives, pesticides, herbicides, antibiotic residues, processing aids, vaccine residues, chemical pollutants and synthesised ingredients. Fast tracking more of the same means taking an uncertain step further down that road. Fast tracking means essentially cutting down on safety testing, or more usually in the food sector simply doing no testing and citing the well-worn but false concept of *'substantial equivalence'* to traditional foods.

Moving on to the UK, where the Starmer administration has signed a deal with pharmaceutical giant Lily Corporation to inject the unemployed with weight loss drugs to get them back to work. Pause for a moment, yes this is absolutely true and actually happening. Health Secretary Wes Streeting said: the unemployed are holding back the UK economy which needs to get moving:)

Readers of the Hatchard Report will be aware of the exaggerated health claims and serious adverse effects associated with injection of semaglutide, the active ingredient in weight loss drugs (see here and here).

We humbly ask how did it all go four years ago when governments signed multi billion dollar deals with pharmaceutical giants? Did it get people back to work? Did it help the economy? Are people more healthy as a result? If you can answer these questions correctly, you will know what government by biotechnology looks like.

How did all this go down? Lily has apparently agreed to invest £280 million in medical R&D in the UK. We can imagine that Lily Corp sent a man in a white coat to 10 Downing Street with a suitcase of investment money carefully primed to promise the earth to a government battling the mother of all health crises. The government might first find out or rather admit what has caused this health crisis and make sensible plans accordingly. Signing a new big pharma deal on top of another failed deal might not be the best plan.

If you are throwing up your hands in frustration and deciding to retire to the peace of your garden, think again. Over in the USA scientists at Michigan University, presumably also wearing white coats, have published a paper in Nature entitled "Comparing the carbon footprints of urban and conventional agriculture". The paper concludes that people growing vegetables in their gardens or allotments have six times the carbon footprint of conventional farming. "Steps must be taken to ensure that urban agriculture supports, and does not undermine, urban decarbonisation efforts," demand the authors. They suggest converting low-tech urban growing sites (gardens) into facilities for "education, leisure and community building". In other words, you won't be able to grow your own food.

The main culprits they identified included poorly managed home compost heaps which have been calculated to produce too much methane for the planet. The authors suggest that "cities can offset this risk by centralising compost operations for professional management", presumably by people in white coats. According to the authors, high compost use also causes nitrous oxide production which can be mitigated by "strategic management of application scheduling and fertiliser combinations to minimise emissions".

The Michigan researchers are part of the new Green Movement who have moved about as far from green as you can get. As Joni Mitchell sang they plan to "pave paradise and put up a parking lot" for electric cars only. Since time immemorial the garden has been a haven of contemplation and enlightenment and a source of real food. It is now being condemned to the past. Where can we make our last stand in this nightmare vision?

We have come a long way from the world of 17th Century poet Andrew Marvel who wrote of time spent in the garden: Meanwhile the mind, from pleasure less,

Withdraws into its happiness;

The mind, that ocean where each kind

Does straight its own resemblance find,

Yet it creates, transcending these,

Far other worlds, and other seas;

Annihilating all that's made

To a green thought in a green shade.

Dr Guy Hatchard
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