

Pharma Food – Biotech on Your Plate

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STORY AT-A-GLANCE

- › Dutch investigative journalist Elze van Hamelen reports on the “tsunami of fake foods” being rolled out by the biotech industry
- › Fake meats are not about your health or the environment’s; they’re a tool to phase out farmers and ranchers and replace them with an ultraprocessed food product that can be controlled by patents
- › Creating lab-grown meat is “insanely expensive” and plagued by bacterial and viral contamination
- › Despite the pharmaceutical-style manufacturing, lab-grown meat isn’t considered a pharmaceutical product, which means no human testing is required
- › Van Hamelen recommends directing your food dollars not to corporate supermarket chains or fake food products but to small farmers growing real food

Lab-grown meat may one day represent 80% or more of the “meat” consumed worldwide,¹ a dramatic departure from the way humans have eaten for centuries. Speaking with Catherine Austin Fitts of “The Solari Report,” Dutch investigative journalist Elze van Hamelen reports on the “tsunami of fake foods”² being rolled out by the biotech industry – and what this means for human health.

The Dutch government is among those investing heavily in lab-grown meat, using technologies made to develop pharmaceuticals. While fake meat is touted as the solution to save the planet and end world hunger, it’s plagued by technological

challenges that make it prohibitively expensive, prone to bacterial and viral contamination and nearly impossible to grow at scale.³

Fake meats are not about your health or the environment's; they're a tool to phase out farmers and ranchers and replace them with an ultraprocessed food product that can be controlled by patents. Remember that if government and corporate entities are able to take control of the food supply via fake food, they also control the people.

How Biotech Grows Meat in Labs

To make fake meat, cell lines are taken from a living organism. They're then manipulated to grow quickly and consistently. "What are cells that proliferate quickly? Either cancers or fetuses. They have cells that proliferate very quickly," van Hamelen says.⁴ For lab-grown meats, biotech is cryptic about what types of cell lines are actually used.

Normally, cells grow in a structure in your body. The cell lines being grown in bioreactors in labs are grown in a thin film or growth medium. In the body, the growth medium is your blood, van Hamelen explains, a complex substance that laboratories try to replicate using fetal bovine serum (FBS) – blood taken from living calf fetuses.

"It's really gruesome how this is harvested," she says,⁵ pointing out that this negates the narrative that lab-grown meats are made without animals. FBS is often used to grow cultured cells because of the proteins and vitamins it contains. A 2013 study stated, "In many common culture media, the sole source of micronutrients is fetal bovine serum (FBS) ..."⁶

When lab-grown chicken made by U.S. startup Eat Just debuted in Singapore in 2020 – marking the first cultured meat to be sold at a restaurant⁷ – it was produced using FBS.

In order to develop synthetic "blood" instead, precision fermentation, using genetically engineered microbes, is used, along with artificial hormones, which can't legally be added to food in the European Union. Micronutrients and minerals must also be sourced, making the process "insanely expensive," van Hamelen says.⁸

How expensive? Use of FBS-free medium may cause cultured meat to cost over \$20,000 per kilogram.⁹ A report from the Good Food Institute (GFI), a nonprofit group behind the alternative protein industry,¹⁰ suggested that if the cost of FBS-free mediums could be reduced, it would drive down the cost of cultured meat by 90%. This, however, is unlikely.

"[T]he report provides no evidence to explain why these micronutrient costs will fall," Joe Fassler, The Counter's deputy editor, wrote in an in-depth exposé about the actual science behind lab-grown meat."¹¹

Contamination May Also Put Lab-Grown Meat Out of Reach

In precision fermentation, GE microbes such as yeast and bacteria are fermented in brewery-style tanks under high-tech, sterile conditions. Contamination must be controlled down to 2 parts per billion, van Hamelen says, "because as soon as there is a contamination ... it becomes riddled with bacteria, and you don't have a cell culture, you have a bacteria culture."¹²

GFI's report assumes that cultured meat facilities of the future will be food-grade, as opposed to pharmaceutical-grade — the latter of which would increase costs even further. But a report by chemical engineer David Humbird for Open Philanthropy¹³ found that cultured meat may remain too expensive to ever come to market, assuming pharmaceutical-grade specifications and aseptic "clean rooms" would be necessary due to the slow growth rate of culture cells.

This makes them extremely vulnerable to contamination from bacteria and viruses. Humbird told Fassler:¹⁴

"Bacteria grow every 20 minutes, and the animal cells are stuck at 24 hours. You're going to crush the culture in hours with a contamination event ... There are documented cases of, basically, operators getting the culture sick.

Not even because the operator themselves had a cold. But there was a virus particle on a glove. Or not cleaned out of a line. The culture has no immune system. If there's virus particles in there that can infect the cells, they will. And

generally, the cells just die, and then there's no product anymore. You just dump it."

Paul Wood, a former pharmaceutical industry executive, added, "We're saying, guys, it has to be pharmaceutical-grade because the process is going to demand it. It's not whether someone will allow you [to run at food-grade specs.] It's just the fact you can't physically do it."¹⁵

Adding to the issues, the human body has vessels that not only deliver nutrients to cells but also get rid of toxins. In the fake meat growing process, there is no vessel system, so the culture starts to generate toxins, and there's no way to get rid of them.

An exposé in Wired points to a number of the technological challenges that van Hamelen speaks of,¹⁶ direct from employees at Upside Foods, one of two companies allowed to sell cultured meat in the U.S. Wired reported:¹⁷

"One former employee says that between the factory opening in November 2021 and the summer of 2022, they saw dozens of attempts to use the bioreactors to produce sheets of tissue, but they rarely resulted in usable meat. At times, production runs were ruined by contamination that meant the meat was unsuitable for turning into a product, the former employee says.

Former Upside employees describe how batches of meat growing in the custom-made bioreactors would frequently be ruined by contamination and have to be incinerated. 'Once they had any indication it was contaminating, they would try to just stop the run, get the cells, and get any results out of it that they could,' says a former employee with knowledge of the process."

Meanwhile, despite the pharmaceutical-style manufacturing, lab-grown meat isn't considered a pharmaceutical product, which means no human testing is required. "If this is brought to market, it's a human experiment," van Hamelen says.¹⁸

Fake Food Has Roots in Central Control

Van Hamelen also describes a war against Dutch farmers that has emerged, threatening to push them off the land they've farmed for generations. As small and mid-sized farms close their doors, governments and corporate entities can scoop up the land, leaving consumers with no choice but to eat the fake lab-grown, animal-free foods they're offering.

You can hear about this in-depth van Hamelen's report and podcast for "The Solari Report" – [Dutch Farmers and Fishermen: The People Who Feed Us](#).¹⁹

"In 2021, the European Union's Natura 2000 network released a map of areas in the Netherlands that are now protected against nitrogen emissions. Any Dutch farmer who operates their farm within 5 kilometers of a Natura 2000 protected area would now need to severely curtail their nitrogen output, which in turn would limit their production," Roman Balmakov, Epoch Times reporter and host of 'Facts Matter,' says.²⁰

Dutch dairy farmer Nynke Koopmans, with the Forum for Democracy, believes the nitrogen problem is made up. "It's one big lie," she says. "The nitrogen has nothing to do with environmental. It's just getting rid of farmers." Another farmer said if new nitrogen rules go into effect, he'd have to reduce his herd of 58 milking cows down to six.

Nitrogen scientist Jaap C. Hanekamp, Ph.D., was working for a government committee to study nitrogen, tasked with analyzing the government's nitrogen model. He told Balmakov:²¹

"The whole policy is based on the deposition model about how to deal with nitrogen emissions on nature areas. And I looked at the validation studies and show that the model is actually crap. It doesn't work. And doesn't matter. They still continue using it. Which is, in a sense, unsettling. I mean, really, can we do such a thing in terms of policy? Use a model which doesn't work? It's never about innovation, it's always about getting rid of farmers."

Fake Food a 'Dangerous Chapter' in 'the Great Poisoning'

Once you get rid of farmers, the only food choices left will be lab-grown products, insects and other synthetic foods. According to Fitts' Solari Report:²²

"Synthetic food and lab-grown meat represent a new and dangerous chapter in what I call 'the Great Poisoning.' Despite an economics that makes no sense – and clear indications that these products are repugnant to consumers – money is apparently no object.

Staked by massive infusions of venture capital and burgeoning public-private partnerships, items like cricket flour and lab-cultured 'eggs' have already made their way into grocery stores – with non-existent or misleading labeling designed to get past unwary consumers' defenses.

As Elze's research shows, this is a multipronged attack, with synthetic foods also targeting pets and livestock. There is every indication that governments, corporations, and others are serious about establishing a tightly controlled food system that replaces real food and real meat with synthetic, pharma-inspired 'alternatives.'"

One way you can fight back, aside from supporting farmers producing real food using real farming, is to contact your representatives and encourage them to vote in favor of the Prime Act. Introduced by U.S. Rep. Thomas Massie, the Processing Revival and Intrastate Meat Exemption (PRIME) Act would allow farmers to sell meat processed at smaller slaughtering facilities and allow states to set their own meat processing standards.

Because small slaughterhouses do not have an inspector on staff – a requirement that only large facilities can easily fulfill – they're banned from selling their meat. The PRIME Act would lift this regulation without sacrificing safety, as random USDA inspections could still occur.²³ Ultimately, the Act would make meat much more affordable and available.

The answer to food safety and security lies in a decentralized food system that connects communities with farmers growing real food sustainably and distributing it locally. Van

Hamelen recommends directing your food dollars not to corporate supermarket chains but to small farmers or their intermediaries.

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