

Could lab-grown meat pave the way for more ethical, environmentally friendly food?

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Credit: Pixabay/CC0 Public Domain

"No animals were harmed in the making of this burger."

After the Food and Drug Administration's recent declaration that a lab-

grown [meat](#) product is "generally recognized as safe" for consumption, don't be surprised if you see that label on a menu in years to come.

The product approved by the FDA was a chicken alternative created by California-based startup Upside Foods using real [animal cells](#), not slaughtered animals. It's not exactly a tank-grown chicken breast. Think ground chicken, not rotisserie.

Proponents of the technology argue a shift toward cultured meat would address some of the [ethical concerns](#) around [animal welfare](#) in mass produced [food systems](#) while also mitigating the environmental impacts of meat production. Ronald Sandler, professor of philosophy at Northeastern and director of the university's Ethics Institute, isn't so sure.

"It's a false dichotomy," Sandler says. "It's not a choice between lab-grown meat and having 'meat off the hoof,' especially in the context where there's large amounts of plant-based product alternatives. There's also just not having any kind of meat or meat likeness foods in your diet."

Sandler acknowledges that the ethical issues lab-grown meat aims to address are significant. Animal agriculture accounted for 40% of all emissions in food production, according to a [2020 USDA study](#), and the mass-scale, corporate-run meat productions, also known as concentrated animal feed operations, are notorious, Sandler says. Thousands of animals are crammed into tight spaces. In order to prevent animals from hurting each other, they are kept docile through debeaking, declawing and castration.

By using animal cells instead of butchering cows, chickens or pigs, lab-grown meat ostensibly avoids some of the ethical pitfalls of meat production. And the industry certainly sees lab-grown meat as a viable

option. The Good Food Institute, a think tank working in "alternative protein innovation," estimates that there are more than 151 companies working on lab-grown meat products with \$2.6 billion in investments. And the U.S. is not alone in exploring cell-cultured meat as an alternative to traditional meat products. Singapore became the first country to allow producers to sell it to consumers, and it was a [much-discussed topic](#) at the recent U.N. Climate Change Conference.

But Sandler says there are already other alternatives to meat that fit the bill. Plant-based meat substitutes, like the Beyond Burger, have risen in popularity and entered the mainstream. Although the market has shown signs of slowing, it remains a viable option for vegetarians, vegans and flexitarians.

"What is the problem that this solves that we don't already have options to solve?" Sandler says.

"If we think these practices are ethically problematic, why are we trying to approximate the product from these practices rather than just getting away from it?" he adds. "For people who care about the food system and food system issues, this is not going to be an ethically better process. This is just going to be another industrially and centrally-produced, highly-processed food."

It also remains to be seen if there is a market for lab-grown meat. If the cost is on par with more traditional meat products, it could be a viable player in the industry. But that's if a public primed to be skeptical of [meat-based alternatives](#) can get over the "yuck factor" of a new meat product.

Substituting one meat product for another also doesn't address the [health concerns](#) that go along with highly processed meat.

"If we're replacing ultra-processed beef burgers with ultra-processed cultured beef burgers, or in this case chicken, that's not necessarily likely to be better, if at all, for our health because it's still got lots of salt and fats and additives," says Dan Crossley, executive director of the Food Ethics Council, a United Kingdom-based nonprofit.

Despite their skepticism, Sandler and Crossley agree that carnivores don't necessarily have to give up meat for good. Sandler says there are already ethical meat production and consumption options: local farms.

"If the question is, what is an ethically sourced way of producing meat, maybe it's not synthetic meat and maybe it's not concentrated animal feed operations," Sandler says. "Maybe it's these other forms of agriculture that other people who are interested in the food system care about because they care about the relationships between farmers and [animals](#), farmers and the land, farms and communities, farmers and consumers."

Crossley notes that [lab-grown meat](#) is only part of the solution to the world's food and climate problems. A cell-cultured piece of chicken isn't going to solve the root cause of poverty or address how much of the world's food is wasted every year. It's an option worth exploring—just not one that people should stake their future on.

"It's important to explore this, but we don't see this as a silver bullet, a single answer to these problems," Crossley says. "At the same time, while it's being explored and questioned, let's also look into some of the measures we can take now around promoting less and better meat and more and better whole grain, fruit, veg and healthier food. It's not the case that we have to wait for some perfect solution."

Provided by Northeastern University

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