

Sustainable meat? Debate over the benefits (or drawbacks) of cell-based beef and chicken more nuanced than critics and supporters acknowledge

[In 2016 I was pretty optimistic](#) about lab grown meat, and now I am still optimistic but more tempered. I think I fell for a common futurist mistake of overestimating short term progress, but in my defense the industry was also overly optimistic.

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Bioreactors are expensive to build and operate. The optimistic projections of cultured meat are dependent upon a dramatic reduction in cost through improvements in technology. They are also dependent upon the ability to scale up production.

Both of these are problematic assumptions, and so far have proven overly optimistic.

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For example, even a very large and expensive bioreactor facility could produce in a year what a similarly priced meat processing plant can produce in a week. About 5,000 such facilities would be necessary to produce the current output of the meat industry. That's not impossible, just very expensive.

Still, there are companies claiming significant reduction in the cost per pound of cultured meat. [An Israeli company](#), Future Meat, claims it can produce cultured chicken at \$7.70 per pound, about twice as expensive as meat from chickens. Given that the price started at about \$30,000 per pound, it does not seem unreasonable to think that another 50% reduction is possible. [A cultured meat burger](#) would now set you back about \$9.80. That's an expensive burger, but within the range you might pay at a restaurant rather than fast food.

[**This is an excerpt. Read the original post here**](#)