

Cultured Meat

Emerging Technology

By: Ryan Li



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History

-Cultured meat is the harvesting of cells from a living animal to cultivate and grow into meat. In short, lab-grown meat harvested from a few animal cells.

-Cultured meat (a.k.a cultivated meat) was first popularized and made aware of in the early 2000s

-Created to get the same feel and flavor as real meat but without environmental impacts or animal cruelty.

-In 2013, Dutch scientist Mark Post created the first ever cultivated meat burger on live T.V.

-The world's first ever commercial sale of cultured-meat occurred in December of 2020 in Singapore.



Plan and Implementation

-Cultured meat is planned to be produced at a global scale and to produce more different variety products.

-Cultured meat can help slow climate change and is a more humane method of obtaining meat.

-Some companies plan to mix cultured meat with plant-based products, while others want to make different ingredients out of cultured meat such as fats.

-Even though cultured meat is technically still meat (therefore non-vegan), its main appeal is for omnivores that are worried about the ethics of where meat usually comes from.



Planned to be sold globally and used in restaurants all over. Still kind of expensive now, but price will hopefully become cheaper. Cultured meat appeals most to meat-eaters that enjoy meat, but are worried about how the meat is obtained or any potential downsides to health.

Pros +

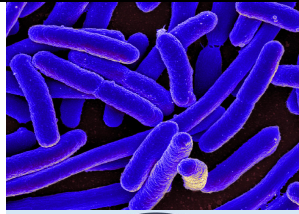
- Environmentally friendly
- Reduced animal cruelty
- Healthier
- Increased access to food
- More sustainable
- Production of meat



Mostly a cleaner, sustainable, healthier way to make meat. Keeping up with meta demand without the usual cons.

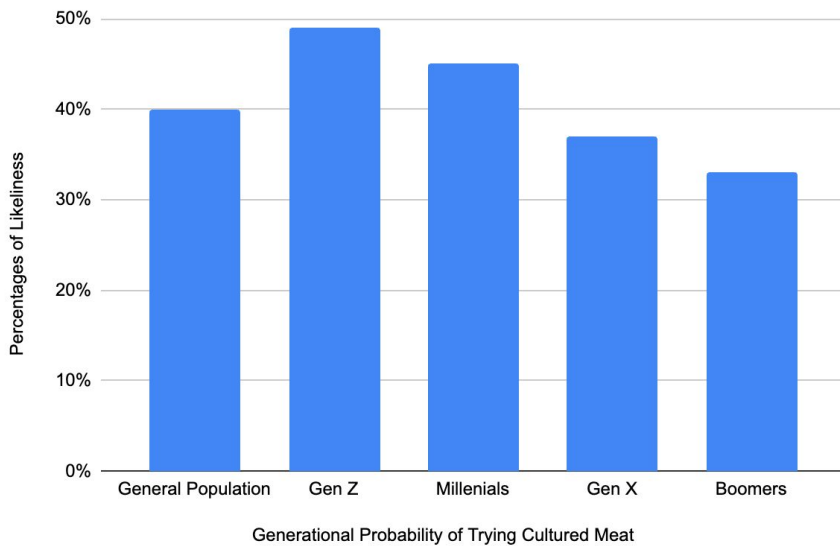
Cons —

- Too much time
- Very expensive to produce
- Risk of contamination/hard to regulate
- Still meat (for vegans and vegetarians)
- Same problems as real meat (High cholesterol)
- Still being researched



Main problem is that lab-grown meat is still being researched and we can't be sure about the qualities quite yet.

Opinions on Cultured Meat (Chart Made in Excel)

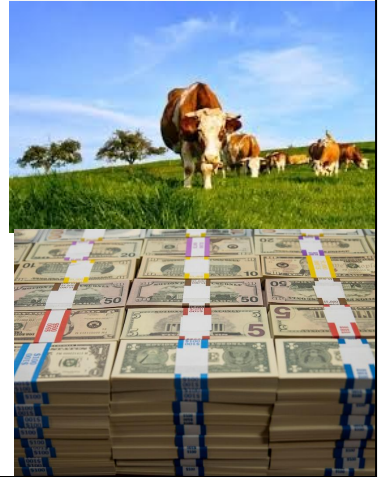
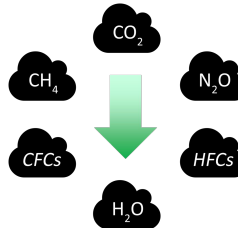
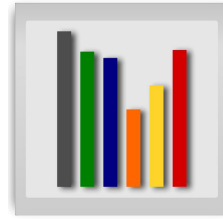


<https://docs.google.com/spreadsheets/d/1QIT3-a3t6OC2AjskMcFoxKGsMjuVNX4aExysYStmEadit7nls1Bvde0>

As you can see, the newer generations are all willing to try cultivated meat. The majority of each generation are all willing to try or are considering.

Success and Statistics

- Cultivated meat can cut down greenhouse gas emissions by 96%
- Can cut down water consumption by 82-96%
- 1 pound of lab-grown meat can cost \$17 dollars to produce
- The cultured meat market has been valued at 249 million USD and is estimated to grow 51% from there.

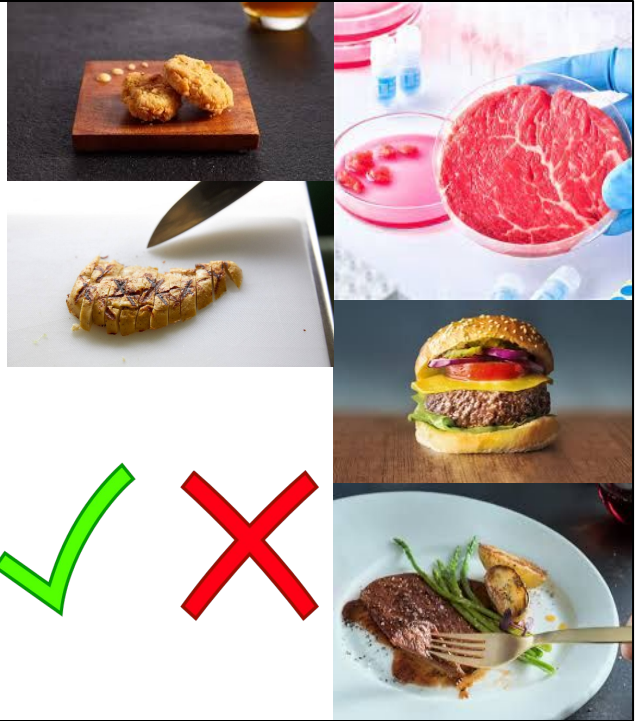


Market continues to grow, and there are many positive benefits with this as well. However, there are downsides as well

Summary

SUMMARY

-In summary, I am for this advancement of cultured meat, due to the positive benefits it can provide. However, there were some moments where I would have been against cultured meat. Overall, I am for this advancement of technology.



Positive benefits include efficiency, potential to be cheaper, and more environmentally/animal friendly. However some negatives were the price it took to produce

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