

# Consumer snapshot: Cultivated meat in the U.S.

Overview of consumer needs, perceptions, and demand, 2024



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#### **Executive summary**

Most Americans haven't heard of cultivated meat. Most who have known it as "lab-grown," though they tend to find "cultivated" more appealing. Americans are not yet familiar with potential environmental and health benefits of cultivated meat, and are divided on how well it will approximate the sensory experience of conventional meat.

All data from Poll by Morning Consult on behalf of GFI: n=2,214 U.S. adults, May 2024, unless otherwise specified.

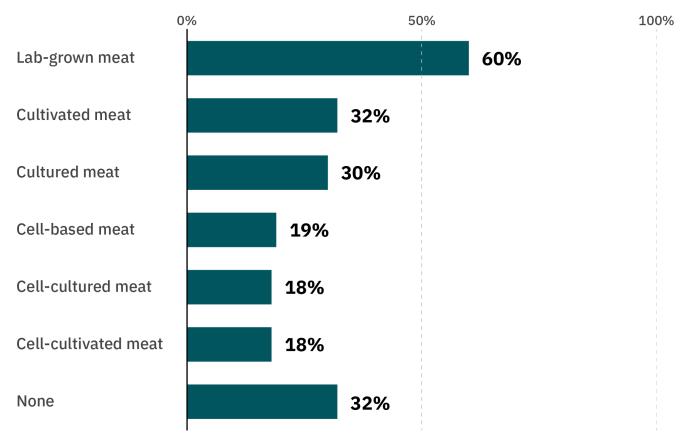


Photo courtesy of UPSIDE Foods

## How many Americans have heard of cultivated meat?

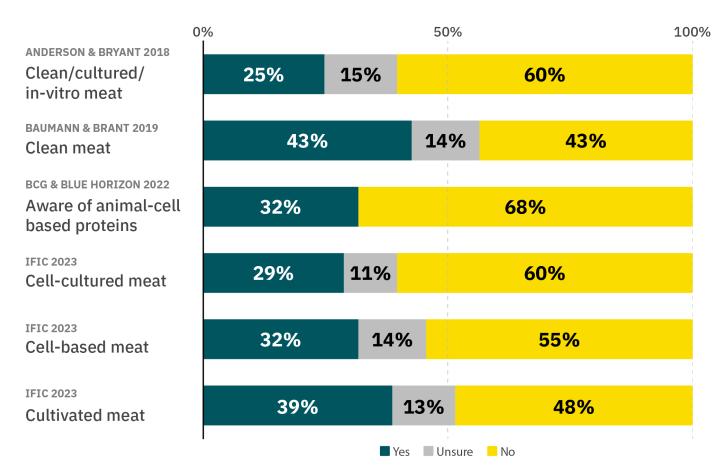
Cultivated meat is a novel technology. While many companies developing or commercializing meat grown directly from cells refer to it as "cultivated," Americans are also exposed to the term "lab-grown" in the media. This term is inaccurate in the sense that facilities capable of producing cultivated meat at commercially viable scales look more like breweries than laboratories. But measuring and comparing perceptions of both terms is necessary to understand Americans' conceptions of and expectations for this technology and products made from it. Americans are likely to have heard of the term "lab-grown" meat, but tend to find "cultivated" accurate and more appealing when the technology is explained to them.

GFI research shows 38% of consumers have heard of "lab-grown," compared to 23% for "cultivated." Other research has shown up to 60% of consumers claiming to have heard of "lab-grown" meat (Fig 1). Most research finds awareness for other terms like "cultivated" and "cultured" in the range of 20–40% (Fig 2).



#### Figure 1. Awareness for different terms for cultivated meat (2022).

*"Lab-grown" had the highest awareness in a 2022 study by GFI.* Poll by Embold Research for GFI of n=1,018 U.S. adults, December 2022.



### Figure 2: Awareness of cultivated meat in other studies. Rates of awareness vary by the name used for cultivated meat and over time.

Anderson & Bryant, 2018: Messages to Overcome Naturalness Concerns in Clean Meat Acceptance: Primary Findings. Baumann & Bryant 2019: Can Nutritional Enhancements Boost The Consumer Appeal of Cultured Meat? IFIC 2023: Innovations in Alternative Proteins

Online search trends suggest that "lab-grown" is the most commonly used term online. Google Trends shows that searches for "lab-grown" meat are consistently several times higher than for other terms like "cultivated," and that they spike exponentially higher around industry milestones, like after the USDA and FDA issued No Questions Letters for GOOD Meat and UPSIDE Foods to sell cultivated meat in the United States (Fig 3).

Regardless, after this technology is explained to consumers, only 27% say they are "very" or "somewhat" familiar (Fig 4).

This is consistent with rates seen in research conducted by GFI in 2022.<sup>1</sup>

#### What name for this technology do Americans find most appealing?

Americans find some commonly used terms for cultivated meat more and less appealing than others. Americans are more likely to rate "cultivated" as "very" or "somewhat" appealing vs. "lab-grown" (19% vs. 11%). They're also much more likely to find "lab-grown" to be somewhat or very unappealing vs. cultivated: 67% vs. 53%. Overall "cultured" and "cultivated" perform comparably.

## How appealing do Americans find the concept of cultivated meat?

After cultivated meat is explained to Americans in terms of what it is and how it's made:

- 32% find it "very" or "somewhat" appealing
- 28% would be "extremely" or "very" likely to try it if offered a free sample
- 17% would be "extremely" or "very" likely to purchase

These metrics also vary by how the technology is explained:

- A study by Perdue in 2024 found as high as 60% willing to try "cultivated chicken in a restaurant setting."<sup>2</sup>
- Fewer are willing to try when asked as "meat grown using cells from animals"<sup>3</sup> or "laboratory-grown meat."<sup>4</sup>
- A study in 2021 found a slightly higher 26% willing to buy "cultivated meat."<sup>5</sup>

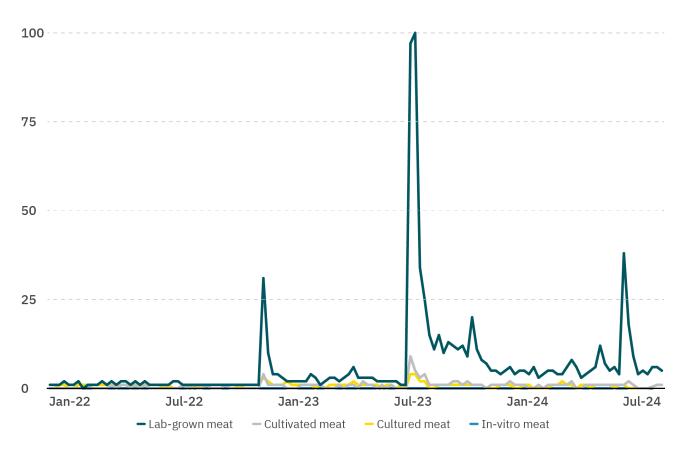
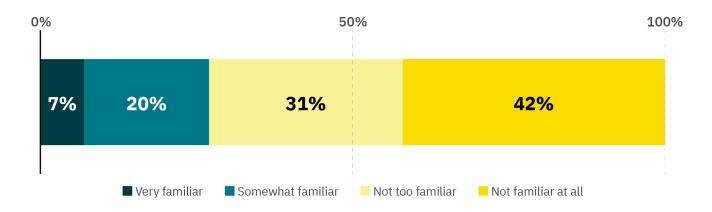


Figure 3: Use of terms for cultivated meat in U.S. Google searches, 2022-2024. Results are indexed to 100 based on the highest-volume day for the term with the most searches. Google Trends.



### Figure 4: How familiar are you, if at all, with: cultivated meat (also sometimes called cultured meat or lab-grown meat). Familiarity with cultivated meat.

Only 1/4 of consumers feel they are familiar with cultivated meat, even when it is clarified to be the same as "lab-grown" or "cultured" meat

Consumer openness varies by demographics. Younger consumers, and especially millennials, are more likely to be "extremely" or "very" likely to try cultivated meat if given a free sample:

- Gen Z: 32%
- Millennials: 36%
- Gen X: 23%
- Baby Boomers: 24%

Male consumers are more likely to be "extremely" or "very" likely to try cultivated meat than women consumers: 36% vs. 20%.

## What do Americans expect from cultivated meat?

People mostly don't know what to think about cultivated meat. This is unsurprising, given its novelty. When asked whether they expect it to be sustainable, healthy, processed, tasty, and other descriptors, Americans are likely to say they don't know whether it will be better than conventional meat, comparable, or worse after hearing it described in terms of how it is made.

For taste, Americans are split into almost equal thirds believing that cultivated meat would be equal or better to conventional (27% and 8% respectively), not as good as conventional (32%), and not being sure (32%). This is understandable since very few have had a chance to try, since cultivated meat in the United States has been sold commercially at just two locations. A total of 44–45% of Americans expect cultivated meat would be equal to or better than conventional on nutrition-focused attributes: high protein, low saturated fat, low cholesterol, and a good source of vitamins and minerals; 28–39% are unsure. However, many believe conventional meat is higher in protein (27%) and healthier (23%). While cultivated meat is made from the same building blocks as conventional meat (amino acids, carbohydrates, fats), companies should consider nutritional profiles of their products, and consumers' needs for their specific products and whether and how to communicate nutrition benefits. While life cycle analyses suggest the impact of cultivated meat production using sustainable energy at scale would be lower than conventional meat,<sup>6</sup> many consumers do not yet believe this.

- 27% believe cultivated meat will be better for the environment than conventional meat.
- 23% are neutral.
- 17% believe conventional meat is better.
- 33% are unsure.

While consumers often claim to be motivated by sustainability more than their actual purchase patterns would indicate, this is a core difference from conventional meat and may be worth marketing.

#### How we explained cultivated meat to consumers in this research

Cultivated meat is essentially the same as the meat we eat today, but grown directly from animal cells. Cultivated meat looks, cooks, and tastes the same as conventional meat. The process of cultivating meat uses the same basic nutrients needed to build muscle and fat and the same biological process that happens inside an animal. At scale, cultivated meat is produced in a facility similar to a brewery. Cultivated meat has been sold at restaurants in the United States.

## What would motivate Americans to try and buy cultivated meat?

It is likely too early to tell how well claims and messages about cultivated meat will resonate with consumers. However, research has consistently shown that consumer interest in cultivated meat is potentially driven by motivators like health, curiosity, environmental benefits, and indulgence without sacrifice.The <u>International Food</u> <u>Information Council's 2023</u> survey on alternative proteins found that curiosity (32%), environmental benefits (28%), not requiring animal slaughter (28%), and health (26%) were the top reasons motivating consumers to try cultivated meat among those interested (with interested consumers selecting up to two reasons). Research in 2022 by GFI and Embold Research found that a wide variety of messages about cultivated meat increased consumers' rated appeal, including health (55% found health messages made cultivated meat somewhat or much more appealing); climate change and environmental benefits (both 47%); and offering the same and potentially better taste, texture, and freshness than conventional meat (also 47%). The health message included both public health messaging around reduced risk of foodborne illness and pandemic, as well as personal health reasons like lack of hormones, antibiotics, and steroids, suggesting that consumers are interested in a variety of personal and public health benefits from cultivated meat.<sup>7</sup>

Some evidence suggests that consumers are likely to be persuaded by certain factors, including the recent USDA/FDA No Questions Letters for cultivated meat and by seeing others eat it. IFIC's 2023 survey (conducted before the USDA/FDA's No Questions Letters in June 2023) found that 63% of consumers think cultivated meat would be safe if approved by USDA/FDA.

### What's next?

These consumer metrics and perceptions suggest that:

- The concept of cultivated meat is still new to most Americans, despite its recent regulatory milestones.
- The industry will need to work to increase awareness of terms like "cultivated" if consumers are to associate it with these products, or to highlight that cultivated meat will not be grown in a "lab" environment at scale.
- Consumers are interested in many of the potential benefits of cultivated meat in terms of sustainability, nutrition, and animal welfare, but that work will be required to clarify how cultivated meat compares to conventional meat on these dimensions.

The Good Food Institute surveys thousands of diverse Americans annually to understand their outlook on alternative proteins and will continue to make the results of this research available to the public as the category evolves.

#### References

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- 3. AP/NORC 2023: Few adults are interested in trying "lab-grown" meat
- 4. Statista 2023: Lab-grown meat isn't for everyone
- 5. Szejda & Bryant, 2021: US and UK Consumer Adoption of Cultivated Meat: A Segmentation Study
- 6. Life Cycle Analysis of cultivated meat by GFI Europe and CE Delft, 2022
- 7. GFI: Looking ahead to U.S. cultivated meat adoption



#### About GFI

The Good Food Institute is a nonprofit think tank working to make the global food system better for the planet, people, and animals. Alongside scientists, businesses, and policymakers, GFI's teams focus on making plant-based and cultivated meat delicious, affordable, and accessible. Powered by philanthropy, GFI is an international network of organizations advancing alternative proteins as an essential solution needed to meet the world's climate, global health, food security, and biodiversity goals. All of GFI's open-access insights and data are made possible by gifts and grants from our global community of donors. If you are interested in learning more about giving to GFI, please visit here or contact philanthropy@gfi.org.

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