

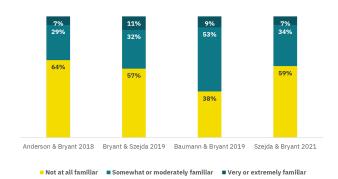
Looking ahead to U.S. cultivated meat adoption

The introduction of cultivated meat into the U.S. market has been highly anticipated. One question that looms large is how consumers will respond. Although pre-taste surveying can't fully answer that question, research shows that there are significant gaps in consumer awareness of cultivated meat. Research also shows that once consumers have a greater understanding of the product, a large number say they are willing to try cultivated meat. Manufacturers, retailers, and other industry stakeholders have an opportunity to champion the benefits of this innovation effectively and address potential concerns. This fact sheet lays out current research findings regarding awareness, motivations, barriers, and demographics of potential consumers to lay the groundwork for mainstream consumer adoption.

Awareness & willingness to try

In the U.S., as many as 64 percent of consumers demonstrate no familiarity at all with cultivated meat. Roughly one in 10 are very or extremely familiar with the concept. This means that there is a huge opportunity to familiarize most consumers with cultivated meat and its benefits.

Consumer familiarity with cultivated meat

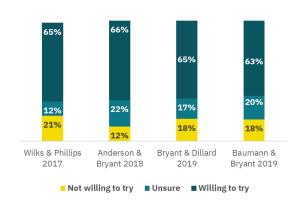


(Sources: 1,2,3,4)

Despite these low levels of awareness, it appears that the majority of U.S. consumers, once

introduced to the concept, are willing to try cultivated meat. Across multiple studies, more than 60 percent of consumers reported being willing to try cultivated meat.

Consumer willingness to try



(Sources: 1,2,3,4)

Research conducted in December 2022 by Embold Research and commissioned by the Good Food Institute found explaining cultivated meat's similarities to conventional meat improves appeal.

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After being offered a description of cultivated meat that emphasized that cultivated meat can look, cook, and taste the same as conventional meat, the percent of consumers who said they found cultivated meat very or somewhat appealing rose from 19 percent to 31 percent.

This is a similar finding to previous research from <u>Szejda and Bryant</u> that showed that support for cultivated meat in the U.S. and the U.K. increases after the technology is explained to consumers.

As we move up the engagement ladder and gauge willingness to buy, replace, and pay more, we see a narrowing in potential consumers, with less than 25 percent of consumers reporting willingness to pay more for cultivated meat than for conventional meat (1,2,3).

Demographics

Research suggests that certain consumer groups are more likely than others to engage with cultivated meat (1,2,3,4), and thus likely to be early adopters. These include:

- Younger generations
- Those with higher income levels
- Those with higher levels of education
- Those who live in urban environments

The GFI/Embold research also explored the perceptions of consumers who say they've eaten less meat over the last few years compared to those who say they have eaten the same or more meat. Compared to consumers who report eating the same amount of meat or more in the last few years, consumers who report **eating less meat** are:

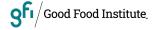
- Almost 2x more likely to say they find cultivated meat very or somewhat appealing—both before and after an explanation.
- 2x as likely to say they are likely to purchase cultivated meat to try at home or at a restaurant.
- More likely to report environmental or animal welfare benefits as reasons to try cultivated meat.
- More likely to find it appealing that cultivated meat looks, cooks, and tastes the same as conventional meat.

Notably, consumers who report **eating more meat** over the last few years are more likely to identify curiosity/novelty as a reason to try cultivated meat. They are also more likely to identify unknown risks as a concern regarding cultivated meat.

Motivations

When it comes to what consumers will look for in cultivated meat products, it appears that parity to conventional meat and tangible benefits, especially personal ones, are critical.





Consumers are looking for cultivated meat to perform similar to or better than conventional meat on <u>taste</u>, <u>texture</u>, <u>appearance</u>, <u>usage</u>, <u>nutrition</u>, <u>and price</u>.

Furthermore, the survey from GFI and Embold Research also found that 65 percent of consumers identified **curiosity/novelty** as a reason they are interested in trying cultivated meat once it becomes available.

<u>Tradition and culture</u> will also play important roles in how individuals assess the value of cultivated meat products, given that, for some, meat consumption has deep cultural roots.

One thing consumers find <u>especially appealing</u> about cultivated meat is its potential to offer <u>food</u> <u>safety benefits</u>—no hormones, no antibiotics, and a lower risk of foodborne illness than conventional meat.

As we've seen with plant-based products, altruistic benefits such as animal welfare and sustainability appear to play a limited role in motivating consumers relative to other benefits. However, U.S. consumers cited <u>potential food security</u> benefits as driving some interest.

Barriers

Potential consumers of cultivated meat report concerns about the taste, price, and health characteristics of cultivated meat. Nearly 80 percent of respondents to a 2017 survey identified 'taste/appeal' as a major concern, underscoring the importance of the first trial. Companies in the space have identified the importance of tasting is believing.

Roughly half of consumers do not appear willing to pay more for cultivated meat, emphasizing that price parity may be an important tool to unlock uptake. Additionally, among meat consumers unwilling to try cultivated meat, 48 percent identified it being 'too processed' as a top concern.

Like with any new food product, cultivated meat messaging will benefit from striking a balance between excitement/novelty and being familiar enough to consumers that they understand how it can fit within their existing food habits and traditions. Introducing cultivated meat to consumers in a friendly, easy-to-understand way will be part of establishing and maintaining openness to the category.

To spread awareness, overcome these barriers, and entice consumers to regularly buy cultivated meat, industry stakeholders will not only have to address consumer concerns but also make clear the benefits of cultivated meat. Significant investments in consumer messaging by the industry will be needed to close these gaps and ultimately drive the adoption of cultivated meat.

Messaging

The GFI/Embold research also tested potential messages on their ability to increase consumer-reported appeal of cultivated meat. The messages that consumers identified as most appealing invoked cultivated meat's health and environmental benefits, as well as its similarities to conventional meat in the cooking and eating experience (which validates similar research that aligning cultivated meat with conventional meat improves favorability).

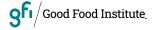




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Most effective messages to increase cultivated meat appeal

Percentage of respondents who indicated that the message makes cultivated meat much more or somewhat more appealing to them:

- Cultivated meat can be grown without added hormones, steroids, or antibiotics, in facilities with cleaner conditions than conventional meat processing facilities. This reduces the risk of both foodborne illnesses and future pandemics.
- 47% Cultivated meat is more environmentally-friendly than conventional meat. Producing cultivated meat requires much less water and land than the production of conventional meat. This means less competition for water in times of drought and the slowing of deforestation. Replacing conventional meat with cultivated meat will also reduce the amount of animal waste created, resulting in less air pollution.
- Animal agriculture is responsible for 20 percent of global greenhouse gas emissions. Replacing conventional meat with cultivated meat produced with renewable energy would result in a massive reduction of greenhouse gas emissions, helping to fight climate change.
- 47% Cultivated meat will have the same smell, texture, and consistency as the meat you enjoy today. It will also taste the same or better than conventional meat—given the production methods, it could have a purer taste and stay fresher longer.

About GFI

The Good Food Institute is a 501(c)(3) nonprofit working internationally to make alternative proteins like plant-based and cultivated meat delicious, affordable, and accessible. GFI advances open-access research, mobilizes resources and talent, and empowers partners across the food system to create a sustainable, secure, and just protein supply. GFI is funded entirely by private philanthropic support.