

COMMUNICATING ABOUT CULTURED MEAT

A Definitive Industry Guide



Source: Mosa Meat

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INTRODUCTION

With the approval of cultured chicken in Singapore in late 2020, it is now more important than ever to talk about consumer acceptance, as well as communication strategies to successfully engage with consumers.

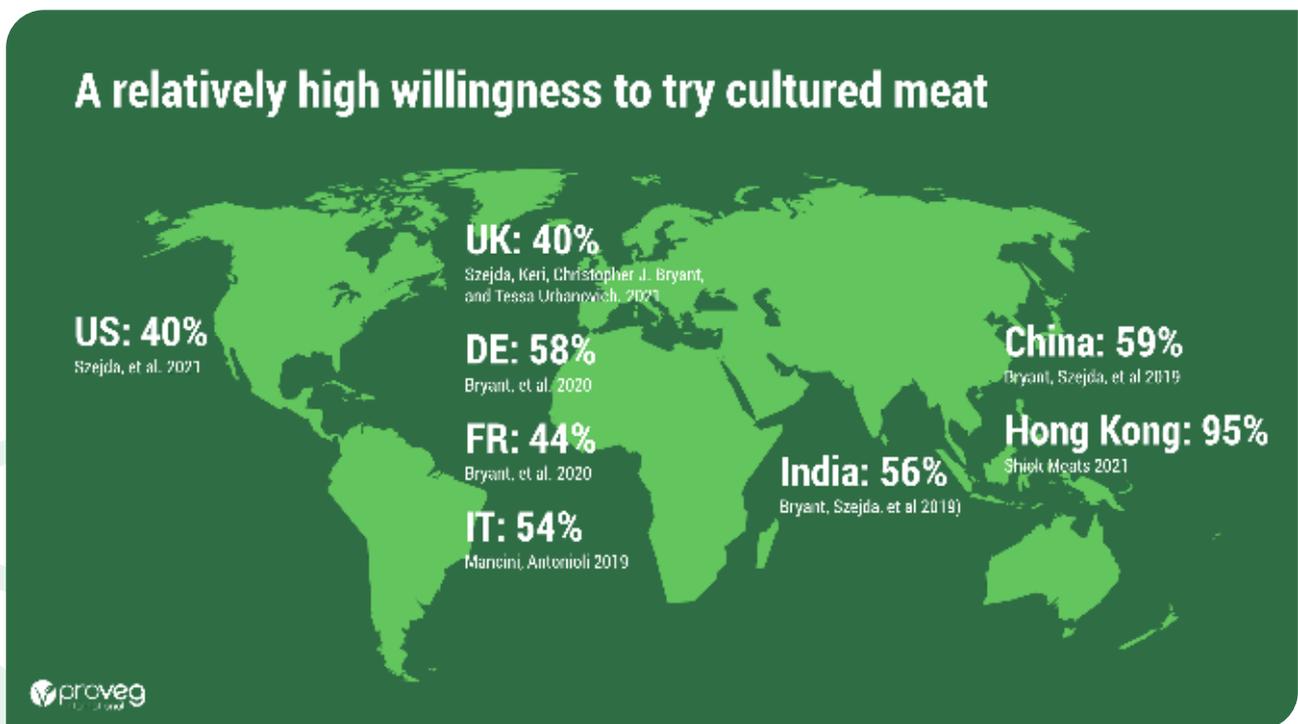
Cultured meat has many benefits in terms of taste, health, food justice, animal welfare, and the environment. However, all expected benefits remain speculative until cultured meats are in supermarkets and people start buying them. So, what is the general trend at the moment in terms of consumer acceptance?

This report aims to provide an understanding of who the potential consumers of cultured meat are and which communication strategies have the potential to lead to greater acceptance.

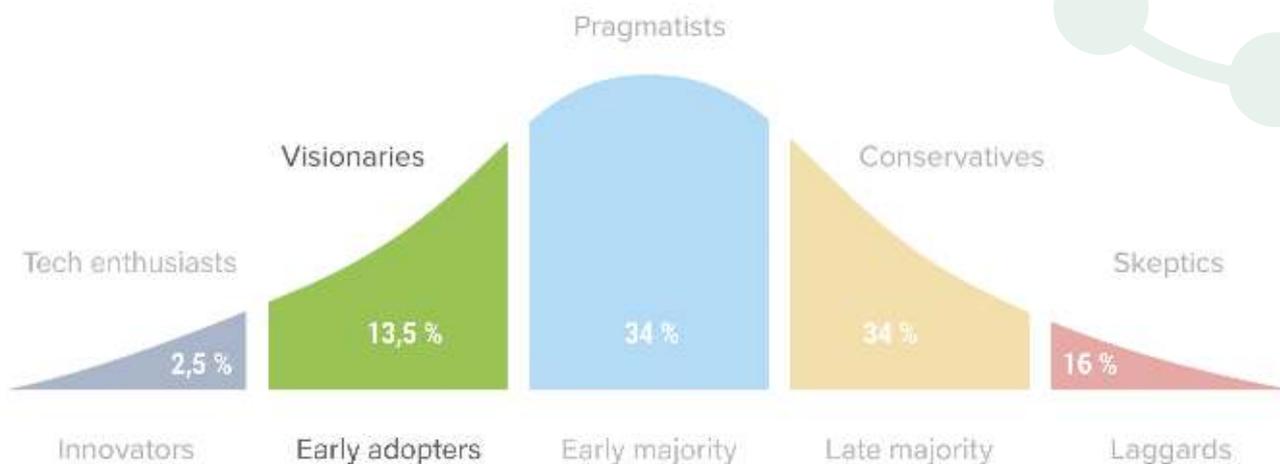


UNDERSTANDING EARLY CONSUMER TRENDS

Cultured meat is portrayed as the future of meat – but will people want to eat these products? While it has the potential to greatly improve the sustainability and security of the global food system, the key to the success of cultured meat will be acceptance. Current research suggests varying levels of acceptance of cultured meat, with many factors coming into play.



Innovation adoption curve



The innovation adoption curve classifies consumers in terms of their willingness to adopt new ideas, technologies, or trends.¹ Looking at the innovation adoption curve:

- Early adopters tend to be the most influential consumers within any market space.
- They are often 'thought leaders' relative to other potential adopters.

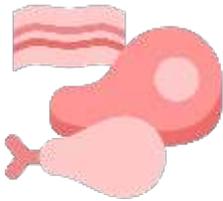
In order to increase the likelihood of cultured meat being widely adopted, it's crucial to understand who the first potential adopters are, what their characteristics are as a group, and define key messages in a way that will resonate with them.

Who are the potential first consumers?

Surveys show that young people between the ages of 18 and 34 are the most likely to be in favour of the production of cultured meat. In Germany for instance:

- 42% of 18-to-34-year-olds are in favour of the production of cultured meat.²
- An encouraging 74% of 18-29-year-olds would taste cultured meat.³
- More notably: 69% of 18-29-year-olds would reach for cultured meat on supermarket shelves were it available.⁴





Gender makes a difference too: across all age groups, men are more likely than women to give cultured meat a chance.⁵ In Germany for instance:

- 62% of men would try cultured meat, compared to 45% of women.
- 53% of men would buy cultured meat, compared to 42% of women.

Other demographic factors play a role: early adopters tend to live in urban areas,⁶ identify as politically liberal,⁷ be more educated, and consume animal-based products, but are also already reducing their meat intake as they are increasingly aware of the impacts of animal agriculture.⁸

A fundamental shift in consumer behaviour

We are currently witnessing a fundamental shift in consumer behaviour towards healthier, more sustainable, and more ethical food products. Cultured meat is thus emerging as a potential option for consumers who are interested in cutting down their consumption of conventional meat without having to compromise on flavour and mouthfeel. Targeting the reducer and flexitarian segments is strategically useful since these two groups are already open to changing their behaviour and also represents a substantial portion of the population.

According to Euromonitor, a growing proportion of the population identifies as flexitarian, indicating increasing interest in deliberate meat reduction. In 2020, flexitarians accounted for 42% of consumers globally. This group still consumes animal-based products but is looking to diversify their diets with healthier, more sustainable, and more ethical food products, while reducing their meat and dairy consumption.



Source: Wildtype

Familiarity is a strong indicator for acceptance

Familiarity is an important driver of the purchase and acceptance of novel food products. Studies show that the more people know about cultured meat, the more willing they are to try it and buy it. This is why it is so important to communicate about the products before commercialisation.

However, cultured meat is still fairly unknown

That being said, the current low levels of awareness around cultured meat means that there is still plenty of room for informing the public, normalising the concept, and making it more well-known and attractive.



In a recent study conducted by ProVeg International, 57% of the 750 participants surveyed showed no understanding of cellular agriculture, while 15% had the wrong understanding of the term, for example stating that it was “plant-based” or that it was meat which is cooked or prepared differently.

Only 16% of respondents had any accurate understanding of cellular agriculture, for example, stating it was made from cells, or that animals are not killed, while less than 2% of respondents had a good understanding of the term.



The study also analysed responses based on dietary habits. Although responses were similar across groups, flexitarians had the most accurate understanding of cultured meat among all dietary groups, with 26% of flexitarians showing some degree of accurate understanding of the term. Similarly, flexitarians (alongside vegans) were the group that exhibited the lowest number of responses that showed no understanding of cultured meat, as seen in the graph below.

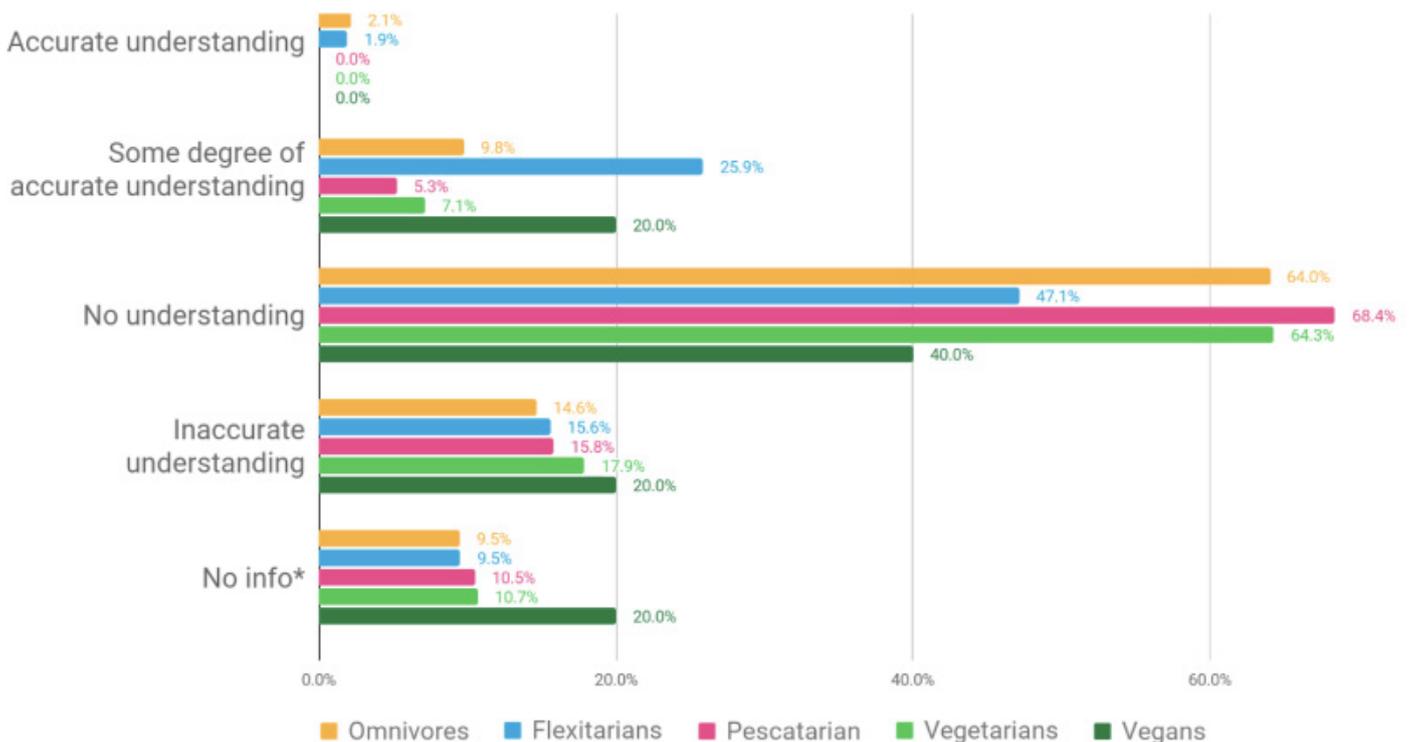
Wordcloud: What do you currently understand about cultured meat?



Open answer question "What do you currently understand about cultured meat?" | Note that pescetarians, vegetarians and vegans have small samples of <50

Since flexitarians are a key target group for cellular agriculture, these results are promising, showing that many flexitarians are already aware of and understand cultured meat to some extent.

With this in mind, communication efforts should focus on education to improve general understanding of cultured meat among mainstream consumers.



Answers relative to the dietary group

What are the most effective ways to promote cultured meat?

What wins people over?

1. Knowing that antibiotics are not used for the production of cultured meat strongly wins people over. 70% of Germans and 59% of French people would be motivated to replace a portion of the conventional meat they eat with cultured meat if they knew that antibiotics were not used for its production.⁹
2. Knowing that cultured meat reduces the risk of contamination by pathogens motivates people to replace a portion of the conventional meat they eat with cultured meat: 63% of Germans and 53% of French people would be motivated to do so.¹⁰
3. The benefits for the environment and knowing that no animals have to be slaughtered are also important motivators (63% in Germany and 49% in France).¹¹



Source: Wildtype

What does this tell us?

- Health aspects are really important to consumers.
- While the benefits for the environment and animal welfare are also important, they come last in order of importance.

Results of a recent study conducted in China showed that the top three reasons associated with a willingness to try cultured meat are:¹²

1. Food security
2. Reduced risks of pathogen contamination and avoiding zoonosis
3. Curiosity

Here again, food security and safety concerns are considered more important than ethical or eco-friendly issues. The perceived healthiness and nutritional value of cultured meat are important for acceptance.

A study in the Netherlands found that messaging about the personal benefits of cultured meat (e.g improved nutritional value, not genetically manipulated, no antibiotics) led to the largest increase in acceptance of cultured meat.¹³ This suggests that emphasising personal over societal benefits can foster greater acceptance. Taste expectations also strongly predict purchase intent. Knowing that cultured meat tastes the same as conventional meat is a decisive factor. It tells us that communicating about the sensory experience of cultured meat can play an important role in consumer acceptance

In a nutshell

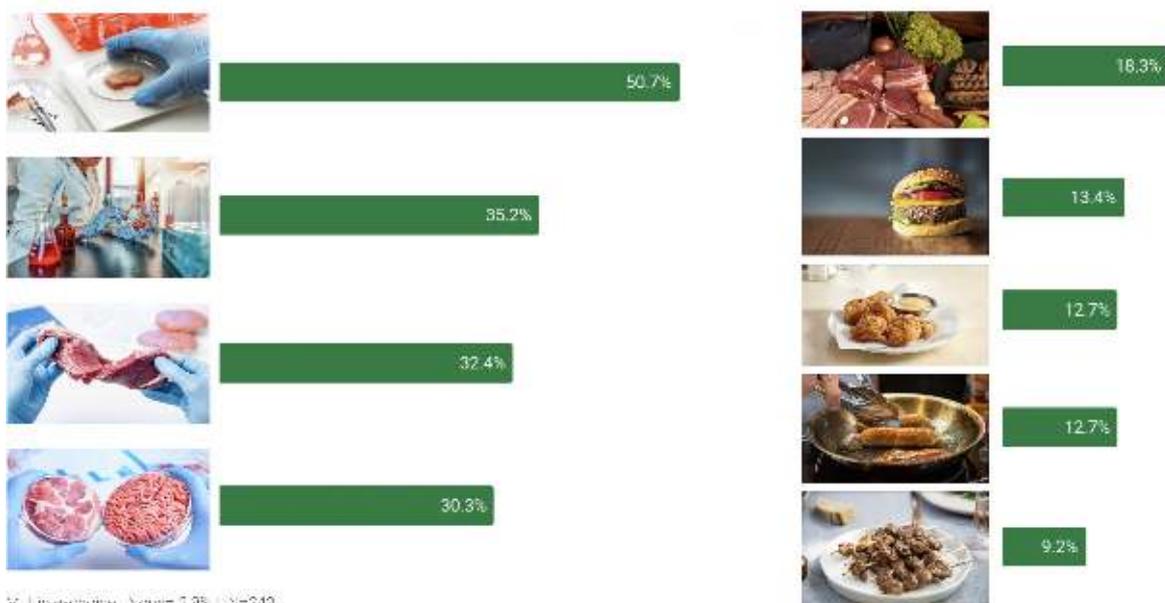
Consumer acceptance studies show that the health, taste, environmental, and animal-welfare benefits of cultured meat are strong factors in the acceptance and adoption of cultured meat. It is interesting to note that personal benefits (e.g. for health, with a reduction of antibiotics or pathogen contamination) outweigh societal benefits (environment and animal welfare).

A picture is worth a thousand words

Cultured meat is a food product not a science experiment. This is why it is important to use pictures of final products rather than petri dishes or laboratory images. The existing photos tagged as cultured or lab-grown meat on stock photo sites are usually images of conventionally produced meat placed in petri dishes. We encourage journalists and companies to use pictures of final products that give the public a more accurate idea of what real cultured meat looks like.

A survey conducted by ProVeg International shows that consumers frequently see lab-based images associated with cultured meat.

Which of these images do you most frequently see associated with cultured meat?



Multiple choice. Scale= 2.25 (N=240)

When survey respondents were presented with either lab-based or food-based images, their sentiment towards how accurately these images portray cultured meat did not vary markedly.

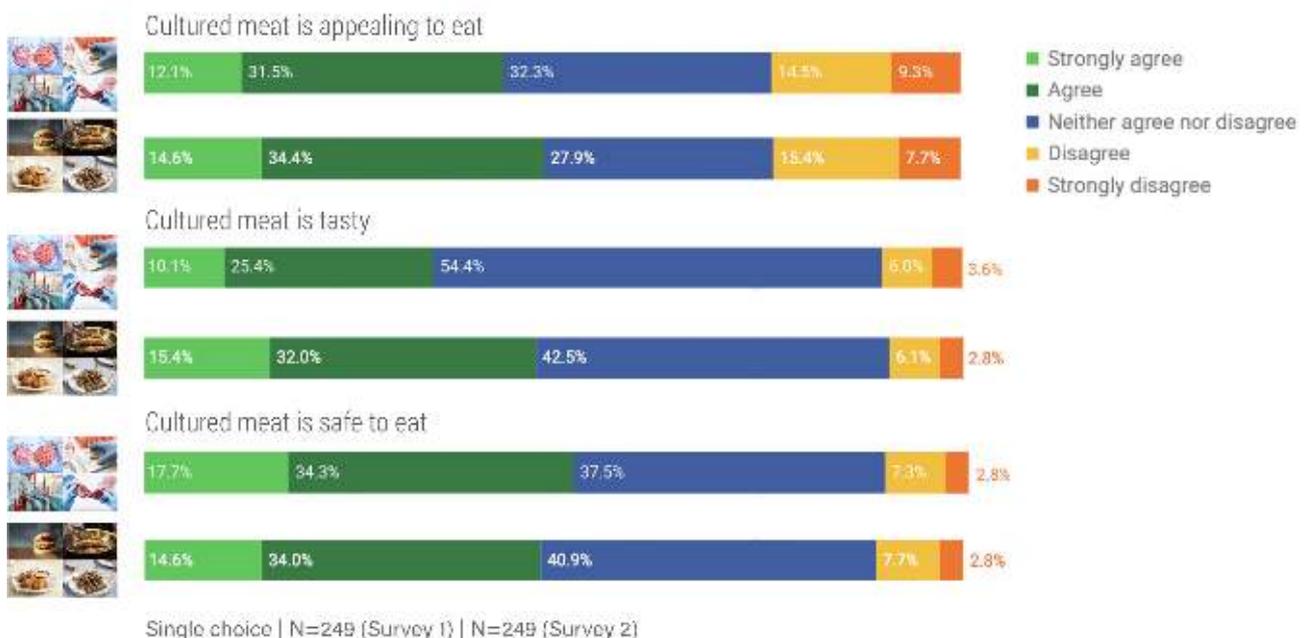
64% of respondents who were presented with lab-based images stated that these images portray cultured meat accurately or very accurately, while 48% of respondents who were shown food-based images stated that these images portrayed cultured meat accurately or very accurately. This difference may be explained by the frequency with which lab-based images represent cultured meat in the media, but it is clear that consumers perceive that both lab-based and food-based images portray cultured meat accurately. This gives us a good opportunity to position cultured meat products as tasty food without confusing consumers.

Results from the same survey illustrated that the images shown to respondents impacted their perception of certain criteria, although the impact is small. 43.6% of respondents who were shown lab-based images agreed or strongly agreed that cultured meat was appealing to eat, while 49% of respondents shown food-based images agreed or strongly agreed that cultured meat was appealing to eat.

When it comes to taste, 35.5% of respondents who were shown lab-based images and 47.4% of respondents who were shown food-based images agreed or strongly agreed that cultured meat was tasty.

Although these are not large differences, we can nonetheless see that respondents who were shown food-based images viewed cultured meat as more appealing and more tasty than did those who were shown lab-based images.

Based on the image and the short description to what extent do you agree or disagree with the following?



With this in mind, ProVeg recommends the careful use of messaging and image selection in external communications. Where possible, food-based images should be used rather than lab-based images in order to ensure a positive reception and increase the likelihood of consumers adopting cultured-meat products in the future.

Despite these results, 18% of cultured meat startups still use lab-based images to describe and communicate about their products.

As well as using food-based images in messaging and press kits, ProVeg also recommends conducting meetings and interviews with journalists in a kitchen setting to promote the use of food-based images and language in media coverage.

Importance of the name

Unappealing descriptors such as 'clean', 'artificial', 'synthetic', 'lab grown', and 'in vitro' are being used significantly more often than neutral descriptors such as 'cell-based', 'cultured', or 'cultivated'.

Terminology	Google results
Artificial	818,000,000
Clean	421,000,000
Cell-based	205,000,000
Synthetic	60,400,000
Cultivated	21,800,000
Cultured	19,400,000
In-vitro	18,100,000
Lab-grown	16,700,000

The term 'lab-grown' is not really representative of the products, as production facilities are more like breweries than labs, once scaled up. Moreover, it is important to note that practically all new processed foods originate in a lab before moving to production facilities.

You may wonder why 'clean meat' is listed as an unappealing descriptor? This is because it directly creates tension with the conventional meat sector since it implies that conventional meat is dirty. However, all stakeholders in the meat sector are working towards the same goal – feeding the population while overcoming the challenges posed by conventional animal agriculture. A collaboration between all stakeholders is crucial in order to drive the transition towards more resilient food systems and, as such, it is crucial not to alienate key players in the conventional meat sector.

Food and science don't go well together.

Studies have shown that a technical framing doesn't lead to more acceptance.¹⁴ In fact, the opposite is true. Highlighting personal benefits and societal benefits led to significantly more positive perceptions than highlighting the technological/scientific aspects of cultured meat, which is largely explained by perceived unnaturalness and disgust. However, at the same time, transparency about the production process is important for public trust.



WHICH ROAD(S) SHOULD COMPANIES TAKE TO COMMUNICATE ABOUT CULTURED MEAT?

How much should companies communicate about the features and benefits of their products versus explaining the technology? ProVeg favours a balance between clear messaging about product features and technological explanations.

Cultured meat is set to be tasty, fresh, healthy, nutritious, affordable (in the long run), and of high quality. It will be able to satisfy all meat lovers.



Non-moralising messaging

Cultured meat will not only be irresistible for many people. It will also be sustainable and considerably better for animal welfare and human health. Therefore, highlighting the benefits of cultured meat is important.

In terms of engaging with the conventional meat sector, it is important to do it in a non-moralising and non-confrontational way. This is an important strategic approach. How you talk about a cultured-meat product – not only to consumers but also to the meat industry – will be a decisive factor for its success.

Education and transparency

That being said, consumer acceptance is not only about marketing but also about education and transparency. Sales should not be the sole communication angle. We also need a lot of education and awareness work to inform consumers about cultured meat and why they should eat it.



Building trust

Building trust is crucial for consumer acceptance. If people feel lied to about cultured meat, it will reduce acceptance. As such it is important to:

- Communicate the science in an understandable way. Don't get lost in too much detail and information. There is a fine line between not enough information and too much, and companies need to navigate this line with care.
- Develop a common language in the industry to describe and talk about cultured-meat production processes. Having an FAQ section on your website and explaining the process in an understandable way is highly recommended.
- Be transparent before people even ask. All potential consequences of the commercialisation of cultured meat should be addressed. These include:
 - Health aspects: what is the composition of a cultured burger patty? What are the ingredients? What is the health impact of cultured red meat, given that red meat is linked to various diseases?
 - How are the cells sourced? What is the culturing medium?
 - What is the impact on farmers?

Best practices

Pilot a production plan in order to engage with the public

In Feb 2020, Aleph Farms, a cultured-meat company based in Israel, launched a visitor centre for people to learn about cultured-meat production processes, as well as a Generation Z advisory board in order to foster dialogue with younger generations.

Wildtype, a startup focusing on cultured seafood, is about to begin operating a pilot production facility in San Francisco. Next to the production site is an education and sushi bar for cultured-fish tastings. Glass doors separate the tasting area from the production floor – everything is transparent in order to show people how seafood can be cultured directly from cells.

“ The facility will be a place where the public can learn about this fascinating new technology. ”

Aryé Elfenbein,
Co-founder, Wildtype



Source: Wildtype

Another first-of-its-kind initiative: in 2020, the Israeli startup SuperMeat opened a restaurant test kitchen in Tel Aviv called The Chicken. They offer their crispy cultured-chicken fillet for customers as a way to normalise cultured meat and bring it closer to commercialisation. While they dine, customers can also peek into SuperMeat's factory, where they can see their chicken-burger patties being manufactured under the same roof.



In November 2021, Upside Foods unveiled its cultured-meat Engineering, Production & Innovation Center (EPIC) in Emeryville, USA. Consumers are invited to tour the facility in order to learn about cultured meat and the production processes used.

“In order for cultivated meat to have a positive impact on the world, consumers need to understand it and embrace it. We know that the more people learn about cultivated meat, the more excited they become about it. That’s why we intentionally designed Epic to be a place where people can come and see for themselves how our process works. These tours offer an unprecedented view into meat cultivation and production. For the first time, delicious and sustainable meat can be produced under one roof, in the middle of an urban community, and in full view of consumers.” – Uma Valeti, CEO and founder of Upside Foods.¹⁵



THE WAY FORWARD

Key recommendations:

1. Gen Z is a key demographic to consider.
2. Meat eaters, reducers, and flexitarians should be viewed as strategic targets.
3. Personal benefits, followed by societal benefits, win people over.
4. Ensure that you communicate before commercialisation.
5. Use neutral terminology and images that highlight the benefits of cultured meat.
6. Use non-confrontational communication that avoids moralising.
7. Make good use of education and transparency.



Source: Mosa Meat

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