



European messaging for cultivated meat

Evidence-based recommendations on cultivated meat communications in French, German, Italian and Spanish

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Executive summary

Industrial animal agriculture is driving climate breakdown, habitat destruction, antibiotic resistance and zoonotic diseases. But EU meat consumption remains [persistently high](#).

With [research showing](#) that taste, price and convenience dictate the majority of people's food choices, GFI Europe believes the most efficient way to address the negative impacts of meat is to change the way it is made.

Cultivated meat has the potential to deliver the meat people want with [up to 92% less climate emissions](#), 95% less land and 78% less water. But to deliver on that potential, governments must invest in the research and support the policies necessary to make cultivated meat affordable, delicious and accessible across Europe – and consumers must be willing to incorporate it into their diets.

Equally, there is a risk that cultivated meat might not succeed in Europe if consumers and policymakers develop negative perceptions of it.

In 2019, the Good Food Institute conducted [research](#) that resulted in our organisation using the term “cultivated meat” in English – but there is a need for more research into effective communications in other key European languages.

So in late 2021, GFI Europe commissioned international communications agency [Team Lewis](#) to conduct surveys, focus groups and creative work in France, Germany, Italy and Spain. Together with native speakers from the sector, we developed and tested positive nomenclature for cultivated meat and messages about its benefits in each language and cultural context. This report sets out the findings and recommendations of that project and, here, we outline some key takeaways.

International trends

In line with the wide variation among the cultures, cuisines and languages represented across these four countries, we found that different communications approaches worked in each context. But some patterns were reflected across all countries.

There was almost universal agreement among survey participants (from 73% in Germany to 90% in France) that eating meat is part of their country's culture. But there was also strong support for reducing conventional meat production and consumption (between 60% and 75%) and for finding alternatives (over 60% in all countries).

However, a majority thought cultivated meat would never taste like conventional meat (60% to 81% agreed), while all of our focus groups emphasised that it must look, taste and cost the same as the meat they eat now. This demonstrates that, no matter how we talk about it, cultivated meat must deliver the sensory experience consumers want.

This was further emphasised by the fact that chefs and dieticians appear to be considered the most trusted voices on this topic in all four countries – because flavour and nutrition are more important than environmental impact or animal welfare when it comes to people's food choices.

The metaphor of growing plants from cuttings in a greenhouse to explain meat cultivation resonated in all four countries, whereas using more scientific language was less appealing.

Our surveys enabled us to categorise consumers according to their openness to cultivated meat. In all countries, those who were most open tended to be regular plant-based meat eaters under the age of 50 who, in many cases, have reduced their red meat intake in recent years.

We found terms that loosely translate to “cultivated meat” appeared to work for consumers in all countries as a name that was clear and easy to understand – but the messages that persuaded them of the benefits varied significantly for each country.

Each country is different

In France, we saw relative scepticism towards cultivated meat, with 33% of survey respondents currently willing to buy it. However, with 46% never having heard of cultivated meat, there is huge scope to explain how it can deliver the meat and seafood they want, while helping to address their concerns about climate change and feed a growing global population.

Media coverage of the topic was most prevalent in Germany, reflected in the fact that 69% of survey respondents there had already heard of cultivated meat. Keenly aware of the animal welfare and environmental issues caused by conventional meat production, 57% were already willing to buy it.

Despite increasingly negative media coverage in Italy, survey respondents there were relatively open to cultivated meat – with 55% already willing to buy it. Italians demonstrated strong awareness of the problems caused by conventional animal farming, and acceptance of the benefits of cultivated meat.

Spanish consumers demonstrated the strongest acceptance of cultivated meat – with 65% already interested in buying it. The term “carne cultivada” came naturally to Spanish participants in our research, who were swayed by many of the public health messages in support of this change in meat production.

Our research makes clear that cultivated meat companies and advocates engaging with European countries must consider each locality individually, and tailor their approach accordingly. While further research is encouraged, this report provides initial insights for those considering communicating about cultivated meat in France, Germany, Italy and Spain.

Sophie Armour, Communications Manager, GFI Europe

Top line recommendations

	Effective nomenclature	Popular benefits
France	Viande cultivée	<ol style="list-style-type: none">1. Feeding a growing population2. Addressing the climate crisis3. Preventing overfishing4. Improving animal welfare
Germany	Kultiviertes Fleisch, Kulturfleisch	<ol style="list-style-type: none">1. Addressing the climate crisis2. Freeing up land3. Preventing overfishing4. Improving animal welfare
Italy	Carne coltivata	<ol style="list-style-type: none">1. Addressing the climate crisis2. Freeing up land3. Preventing antibiotic resistance4. Improving animal welfare
Spain	Carne cultivada	<ol style="list-style-type: none">1. Feeding a growing population2. Preventing antibiotic resistance3. Addressing the climate crisis4. Improving animal welfare

All countries:

- Emphasise flavour and other sensory properties.
- Collaborate with chefs and dieticians.
- Use metaphors to help explain the production process.
- Provide evidence to back up your claims.
- Don't assume your audience already knows about cultivated meat.

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Recommended nomenclature and messages

In this section, we set out our recommendations for companies and advocates communicating about cultivated meat in French, German, Italian and Spanish.

To develop effective nomenclature, we first tested a list of options in each language with our survey participants. While this gave us an initial indication of what terminology might make sense to consumers, the question we asked was open to interpretation, so could not provide reliable results on which nomenclature respondents found appealing.

This led us to ensure our focus groups were asked very clearly whether each of the given nomenclature options would make them want to try or buy this food, and why. Our recommendations for the most appealing nomenclature in each language therefore lean more heavily on these focus group findings, which gave a clearer indication of what terms might be persuasive.

To develop effective messages about its benefits, we asked survey participants for their initial impressions of cultivated meat, their views on conventional meat production, and their reactions to arguments in favour of cultivated meat.

We drew on these results to develop a shortlist of the most promising messages to test in more detail with our focus groups – asking for their reactions and their feedback on how they might be improved.

We worked with native speakers of each language from the cultivated meat sector throughout this project to analyse the results of our surveys and focus groups, draw conclusions as to which nomenclature and messages were most effective, and ultimately to refine the phrasing recommended below.

This section also sets out key findings in relation to which voices are likely to be trusted by consumers, and which demographics are likely to be receptive to cultivated meat, in each country.

For a more detailed explanation of our methodology and research results, please see the chapters on phases 1-4 of the project.

France

Most effective name

Viande cultivée was the most widely used positive term in French media, and performed best in our second focus group. Viande de culture was also well received, and considered synonymous with viande cultivée – but the latter is more concise and familiar in the media.

Most popular benefits

- 1. Population:** **La viande cultivée peut permettre de répondre à la demande en viande compte tenu de la croissance démographique dans le monde.**
This message worked well for the French focus group, as it resonated with an existing concern, and was considered convincing by 60% of survey respondents – and even more of the “challengers”, who were open to cultivated meat.
- 2. Climate:** **La viande cultivée réduit l'impact de notre système alimentaire sur le changement climatique et utilise moins de ressources que l'élevage conventionnel. Selon certaines études, la viande cultivée permettrait de réduire les émissions de gaz à effet de serre de 92 %, la pollution de l'air de 93 %, et nécessiterait 95 % de terres cultivables et 78 % d'eau en moins comparé à l'élevage conventionnel.**
French survey respondents said the environmental impact of animal agriculture is too high. Focus group participants also recognised the need to address climate change, but wanted evidence that cultivated meat had a lower impact than conventional.
- 3. Overfishing:** **Cet aliment évite la surpêche de certaines espèces menacées.**
This was the most compelling argument in favour of cultivated meat for French survey respondents and the first focus group participants, and was well understood by the second focus group.
- 4. Animal welfare:** **La viande cultivée évite la souffrance animale.**
This message was universally well received.

Most trusted voices

Dieticians and **chefs** were trusted voices on cultivated meat in France. Companies should consider partnering with them to present cultivated meat products to the French public.

Most open consumers

People who were open to cultivated meat in France were more likely than average to be **under-50**, have a household income **under €2,000 per month**, **eat plant-based meat** and have **stopped or reduced their red meat** consumption in the last five years.

Germany

Most effective name

Kultiviertes Fleisch and Kulturfleisch performed very similarly with our survey participants, and were seen as neutral and easy to understand by our focus group. Kultiviertes Fleisch was the most used positive term in the German media. Based on our conversations with sector stakeholders in Germany, there is broad agreement that one of these terms will emerge as the favourite – but further research is needed to determine which is preferable for consumers. The term “new meat” was favoured by our focus group, but was not felt to be clear enough to distinguish cultivated meat from other options.

Most popular benefits

- 1. Climate:** Kultiviertes Fleisch reduziert die Auswirkungen unseres Ernährungssystems auf das Weltklima und benötigt weniger Ressourcen, wie Wasser und Futtermittel, als die konventionelle Tierhaltung. Studien zeigen, dass im Vergleich zur konventionellen Viehzucht kultiviertes Fleisch Treibhausgasemissionen um 92 % und die Luftverschmutzung um bis zu 93 % reduzieren kann. Zudem werden 95 % weniger Land benötigt und 78 % weniger Wasser verbraucht.
This message resonated with German survey respondents and the focus group, though they did want evidence of cultivated meat’s lower environmental impact.
- 2. Land:** Diese Lebensmittel ermöglichen es, das derzeit für die Tierhaltung verwendete Land für nachhaltigere Zwecke, wie etwa das Pflanzen von Bäumen oder den Ausbau der ökologischen Landwirtschaft, zu nutzen.
This message convinced German survey respondents and the focus group, though they preferred freed-up land to be used for “sustainable agriculture” instead of renewables.
- 3. Overfishing:** Diese Lebensmittel können die Überfischung bestimmter gefährdeter Arten verhindern.
This message resonated particularly well with the focus group.
- 4. Animal welfare:** Kultiviertes Fleisch vermeidet das Leiden von Tieren.
This message was universally well received, and is a live conversation in Germany.

Most trusted voices

Dieticians and **chefs** were trusted voices on cultivated meat in Germany. Companies should consider partnering with dieticians and chefs to present cultivated meat products to the German public.

Most open consumers

People who were open to cultivated meat in Germany were more likely than average to be **under-50**, have a household income **over €2,000 per month**, and **eat both plant-based and red meat**.

Italy

Most effective name

Carne coltivata was the most widely used positive term in Italian media and performed strongest in our focus group.

Most popular benefits

- 1. Climate:** **La carne coltivata riduce l'impatto del nostro sistema alimentare sul cambiamento climatico ed impiega meno risorse, come acqua e mangimi, rispetto all'agricoltura convenzionale. La carne coltivata potrebbe ridurre le emissioni di gas serra prodotte dall'industria della carne del 92%, ridurre l'inquinamento atmosferico del 93% e utilizzare fino al 95% in meno di terreno e al 78% in meno di acqua.**
This message resonated with over 70% of Italian survey respondents, as well as the focus group participants. We've added evidence that cultivated meat has a lower environmental impact than conventional meat, as the focus group requested.
- 2. Land:** **Il suolo attualmente riservato al bestiame potrebbe essere utilizzato per altri scopi migliori, come il piantare alberi o l'agricoltura sostenibile.**
This message was convincing for Italian survey respondents and focus group participants, though they preferred freed-up land to be used for “sustainable agriculture” rather than “renewable energy”.
- 3. Antibiotic resistance:** **Può aiutare a ridurre il rischio di resistenza agli antibiotici, poiché questo cibo ne è privo.**
This message resonated particularly well with the Italian focus group, who found it reassuring in terms of food safety.
- 4. Animal welfare:** **La carne coltivata evita la sofferenza degli animali.**
This message was universally well received.

Most trusted voices

Dieticians, chefs and **scientists** were trusted voices on cultivated meat in Italy. Companies should consider partnering with dieticians, chefs and scientists to present cultivated meat products to the Italian public.

Most open consumers

People who were open to cultivated meat in Italy were more likely than average to be **under-50**, have a household income **over €2,000 per month**, and **eat both plant-based and red meat**.

Spain

Most effective name

Carne cultivada was the most widely used term in Spanish media and performed strongest in our survey. It was also spontaneously and positively mentioned by our focus group.

Most popular benefits

1. **Population:** Este alimento puede dar respuesta a las necesidades de demanda derivadas del rápido crecimiento de la población y contribuir a satisfacer la creciente demanda de carne en todo el mundo.

This message worked well for the Spanish focus group, as it resonated with an existing concern. It was considered convincing by 74% of survey respondents – and even more of the “challengers”, who were open to cultivated meat.

2. **Antibiotic resistance:** España es el país de la Unión Europea que más antibióticos administra al ganado. La carne cultivada está libre de antibióticos, por lo que puede ayudar a reducir el riesgo de resistencia a los antibióticos.

This message convinced the Spanish focus group, offering reassurance about the safety of cultivated meat.

3. **Climate:** Reduce el impacto de nuestro sistema alimentario sobre el medio ambiente y utiliza menos recursos, como agua y pienso, que la ganadería convencional. La carne cultivada podría reducir las emisiones de gases de efecto invernadero provocadas por la producción de carne hasta en un 92%, reducir la contaminación del aire hasta en un 93%, el uso de tierra cultivada hasta en un 95% y reducir en un 78% el consumo de agua.

This message resonated with 73% of Spanish survey respondents and the focus group, though they did want evidence of cultivated meat’s lower environmental impact.

4. **Animal welfare:** La carne cultivada evita el sufrimiento animal.

This message was universally well received.

Most trusted voices

Dieticians, **chefs** and **personal doctors** were trusted spokespeople on cultivated meat in Spain. Companies should consider partnering with dieticians, chefs and doctors to present cultivated meat products to the Spanish public.

Most open consumers

People who were open to cultivated meat in Spain were more likely than average to be **under-35** and to **eat both plant-based and red meat**.

Phase 1:

Media coverage analysis

To get an initial impression of the existing nomenclature and messages used to talk about cultivated meat in each country, Team Lewis analysed media coverage.

They used the Meltwater media monitoring platform, as well as web searches, to find print and online articles published between 1 January 2020 and 25 January 2022 that used common nomenclature to describe cultivated meat in each language. In total, the team analysed over 11,329 articles.

France

Total articles: 2,632

Most coverage in France was neutral or negative, and the most common nomenclature used was “viande artificielle”, followed by “viande cultivée”. Use of the former declined between 2020 and 2021, while use of the latter increased.

There was increasing debate, particularly in daily national and regional press, over the ethics of farming animals. There was also discussion of consumer acceptance of cultivated meat, politicians speaking out against it and scientists saying there was uncertainty over its environmental and health impacts. French tech and business press were beginning to cover the sector.

Germany

Total articles: 3,634

There was more media coverage in Germany than in the other countries, and the debate in Germany was one step ahead – with a certain level of acceptance that cultivated meat is coming, and discussion of what this means for society. There was coverage of studies around consumer acceptance and projected sales of cultivated meat, and increasing discussion of animal welfare as a priority for the government, with cultivated meat mentioned as being part of the solution.

National and regional TV and press dominated the coverage, and tech media were only beginning to take notice. The most commonly used nomenclature was “Laborfleisch”, followed by “in-vitro-Fleisch” and “kultiviertes Fleisch” – with all searched terms increasing in usage between 2020 and 2021.

Italy

Total articles: 2,267

Media coverage in Italy was increasingly negative, with a prominent ethical debate and questions over consumer acceptance led by farmers’ union Coldiretti. Daily national and regional media dominated the conversation, but tech and business press were beginning to cover the sector.

The most commonly used nomenclature was “carne sintetica”, followed by “carne coltivata” – with both terms seeing an increase in usage between 2020 and 2021.

Spain

Total articles: 2,796

The analysis found that media coverage in Spain tended to focus on how cultivated meat is made, but was increasingly focusing on political, economic and environmental debate.

Business press dominated coverage, and the most commonly used nomenclature was “carne cultivada”, followed by “carne artificial”. Both terms saw an increase in usage between 2020 and 2021.

Phase 2:

Consumer surveys

Working with polling company [OpinionWay](#), we surveyed 1,058 people in France, 1,002 in Germany, 1,011 in Italy, and 1,025 in Spain. All were over 18, selected to be representative of national populations in terms of gender, age, socio-economic status, and region.

The survey asked participants about their meat consumption habits and their existing perceptions of cultivated meat, as well as testing their responses to a range of nomenclature and narrative framings for cultivated meat. All questions, nomenclature and messages were given in the relevant local language. We provided a simple, neutral description of cultivated meat and described it as “this food” throughout to avoid influencing their nomenclature choices.

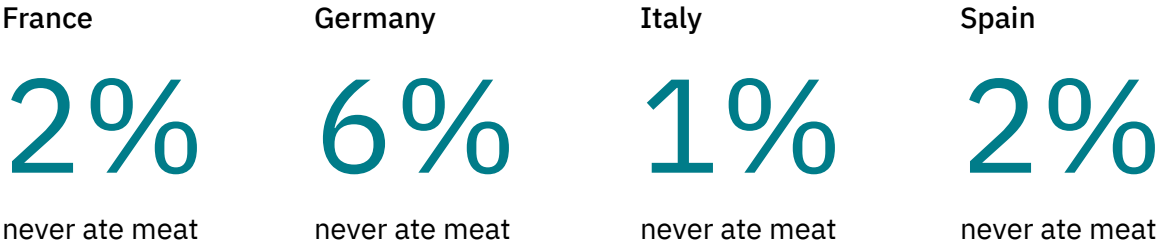
Participants were interviewed using an online self-administered questionnaire on a computer assisted web interview system in February 2022. OpinionWay conducted the surveys using the procedures and rules of the ISO 20252 standard. The margin of uncertainty for the results is 1.4-3 points.

Meat consumption

We asked participants about their meat consumption habits: what they eat, how often, and how their habits have changed over the last five years. For those who had reduced or stopped eating any type of meat, we asked why.

A substantial majority of those who took part in our survey had made conscious decisions to reduce or end their consumption of some meat, driven by ethical and practical considerations. Our findings suggest there could be demand for an alternative, particularly to charcuterie, beef, lamb and pork.

Very few participants never ate meat:



More than half had reduced their consumption of at least one type of meat in the last five years:



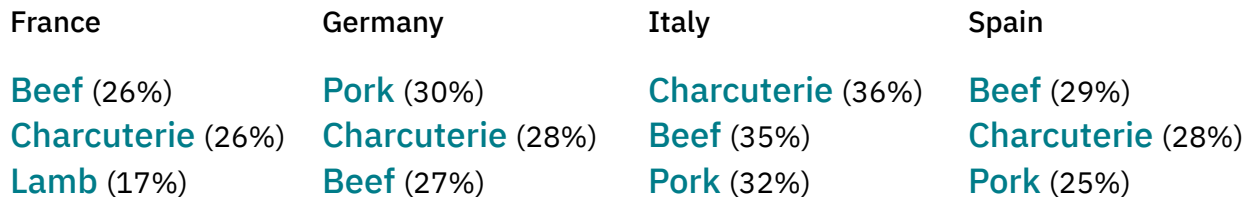
A substantial proportion had stopped eating at least one type of meat in the last five years:



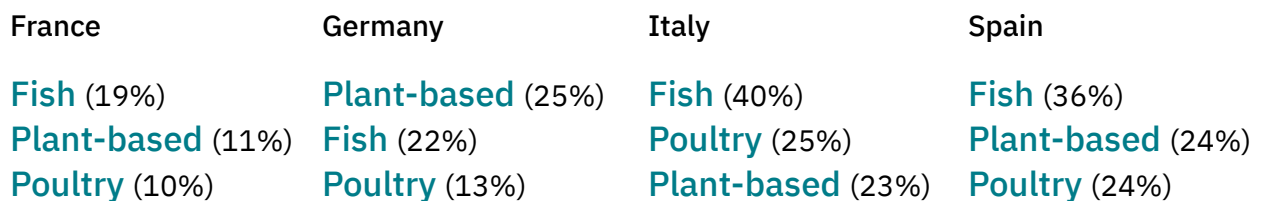
Top reasons for reducing meat consumption:



Meats they planned to cut down on:



Meats they planned to eat more of:



Opinions on meat consumption

We asked participants whether they agreed with a series of statements about eating and producing meat. More than 60% agreed with the below.

These findings suggest a conflict in consumers' minds between two ideas: that meat is a central part of European cuisine and lifestyles, and that existing production methods have negative impacts, so alternatives must be found.

France

Eating meat is part of your country's culture .	90% agreed
Factory farms treat animals badly.	78% agreed
Animal products are too expensive .	66% agreed
Animal farming contributes to antibiotic resistance .	65% agreed
The environmental impact of current animal farming is too high.	63% agreed
The production and consumption of conventional meat must be reduced .	60% agreed
Alternatives to producing and consuming conventional meat must be found.	60% agreed

Germany

Factory farms treat animals badly.	78% agreed
Eating meat is part of your country's culture .	73% agreed
The environmental impact of current animal farming is too high.	68% agreed
The production and consumption of conventional meat must be reduced .	67% agreed
Animal farming contributes to antibiotic resistance .	65% agreed
The land currently used for animal farming could be used for other crops.	63% agreed
Animal farming consumes too many natural resources .	62% agreed
Animals can transmit diseases to humans.	61% agreed
Alternatives to producing and consuming conventional meat must be found.	60% agreed

Italy

Eating meat is part of your country's culture .	87% agreed
Factory farms treat animals badly.	82% agreed
The production and consumption of conventional meat must be reduced .	75% agreed
The environmental impact of current animal farming is too high.	75% agreed
The land currently used for animal farming could be used for other crops.	73% agreed
Animal farming consumes too many natural resources .	72% agreed
Alternatives to producing and consuming conventional meat must be found.	71% agreed
Animal products are too expensive .	70% agreed
Animal farming contributes to antibiotic resistance .	67% agreed
Animals can transmit diseases to humans.	67% agreed
Animal farming destroys natural ecosystems .	64% agreed

Spain

Eating meat is part of your country's culture .	84% agreed
Factory farms treat animals badly.	71% agreed
The environmental impact of current animal farming is too high.	70% agreed
The land currently used for animal farming could be used for other crops.	68% agreed
Alternatives to producing and consuming conventional meat must be found.	66% agreed
Animals can transmit diseases to humans.	65% agreed
Animal farming contributes to antibiotic resistance .	64% agreed
The production and consumption of conventional meat must be reduced .	64% agreed
Animal products are too expensive .	62% agreed
Animal farming consumes too many natural resources .	61% agreed

Existing perceptions of cultivated meat

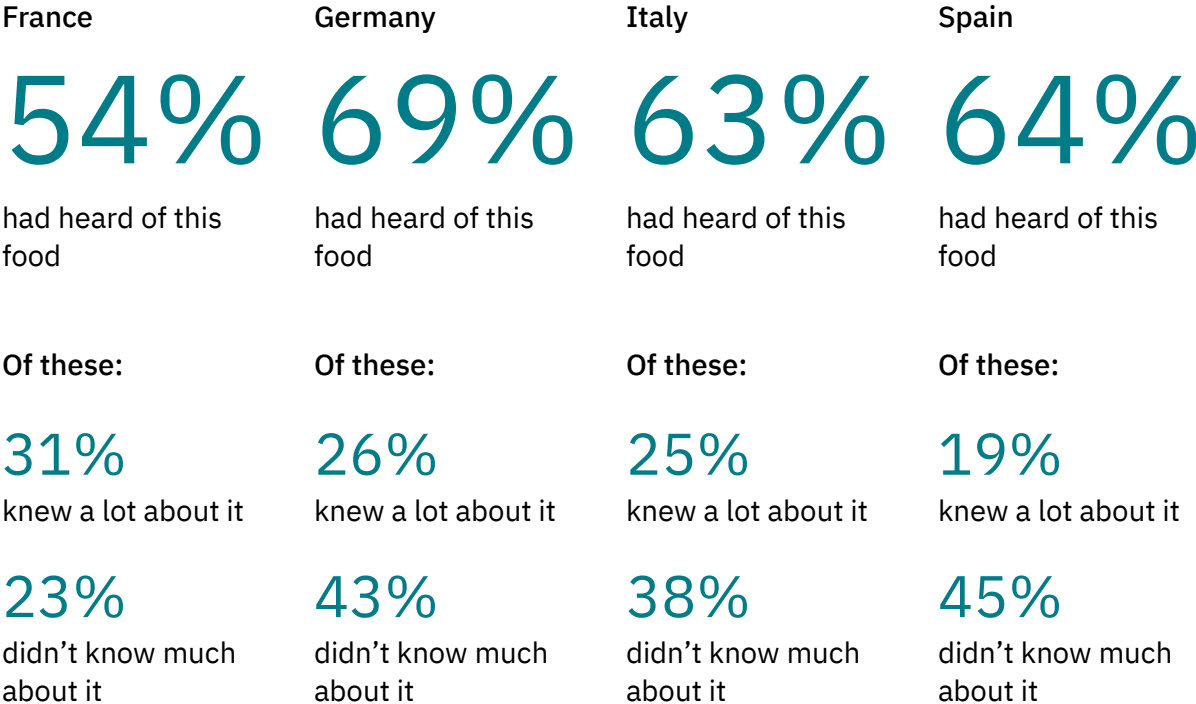
We asked survey participants to respond to the below simple, neutral description of cultivated meat:

“It is possible to create meat from cells taken from a living animal (beef, pork, chicken, fish), which grow in incubators instead of in the animal.”

Our findings suggest there is a significant opportunity to inform the European public about cultivated meat, and a need to address negative perceptions – particularly in France and Italy.

It is also interesting to note that, in every country except Spain, more participants had a negative image of this food than were completely unwilling to buy it – which suggests some openness to persuasion. French participants were less open to cultivated meat than their German, Spanish and Italian counterparts.

A majority of participants had heard of cultivated meat:



Countries varied in terms of how positive their image of cultivated meat was:

France

27%

had a positive image

Germany

55%

had a positive image

Italy

45%

had a positive image

Spain

56%

had a positive image

Full breakdown,
France:

2%

had a very positive
image

25%

had a rather positive
image

40%

had a rather negative
image

32%

had a very negative
image

Full breakdown,
Germany:

10%

had a very positive
image

45%

had a rather positive
image

32%

had a rather negative
image

13%

had a very negative
image

Full breakdown,
Italy:

6%

had a very positive
image

39%

had a rather positive
image

38%

had a rather negative
image

16%

had a very negative
image

Full breakdown,
Spain:

10%

had a very positive
image

46%

had a rather positive
image

32%

had a rather negative
image

11%

had a very negative
image

There is a substantial potential market for cultivated meat:

France

33%

would buy this food

Germany

57%

would buy this food

Italy

55%

would buy this food

Spain

65%

would buy this food

Full breakdown,
France:

6%

would certainly buy it

27%

would probably buy it

39%

would probably not
buy it

27%

would certainly not
buy it

Full breakdown,
Germany:

15%

would certainly buy it

42%

would probably buy it

25%

would probably not
buy it

17%

would certainly not
buy it

Full breakdown,
Italy:

13%

would certainly buy it

42%

would probably buy it

30%

would probably not
buy it

15%

would certainly not
buy it

Full breakdown,
Spain:

14%

would certainly buy it

51%

would probably buy it

25%

would probably not
buy it

10%

would certainly not
buy it

Interest was significantly higher among 18-24-year-olds:

France

48%

of 18-24s would buy
this food

Germany

82%

of 18-24s would buy
this food

Italy

72%

of 18-24s would buy
this food

Spain

79%

of 18-24s would buy
this food

Opinions on cultivated meat

We asked participants whether they had a positive perception of the following aspects of the food described above:

	France	Germany	Italy	Spain
Environmental impact	47% positive	65% positive	69% positive	72% positive
Protein content	45% positive	63% positive	58% positive	65% positive
Health impact	33% positive	55% positive	51% positive	60% positive
Appearance	29% positive	54% positive	50% positive	58% positive
Texture	27% positive	50% positive	45% positive	53% positive
Taste	25% positive	52% positive	43% positive	54% positive

Sources of further information

We also asked whether people would be interested in the following ways of learning more about cultivated meat.

	France	Germany	Italy	Spain
Hear from a scientist working on the subject	58% interested	61% interested	65% interested	73% interested
Taste the food prepared by a chef	50% interested	65% interested	62% interested	69% interested
Read an article from a food journalist who has tasted this food	51% interested	60% interested	61% interested	64% interested
Ask a company that makes the product	44% interested	60% interested	59% interested	62% interested
Ask a NGO that works on the issue	45% interested	56% interested	59% interested	59% interested
Visit a production centre	43% interested	57% interested	53% interested	59% interested
Go abroad to taste it in a country where it is already available	30% interested	45% interested	44% interested	47% interested

Initial message test

We then asked participants whether they agreed with a series of messages in favour of cultivated meat, to gain further insight into what might be appealing. More than 60% of participants agreed with the following:

France

This food can reduce animal suffering.	65% agreed
This food can meet the needs of a rapidly growing human population .	62% agreed
This food can reduce animal exploitation.	61% agreed
This food will be able to feed people in countries with increasing demand for meat.	60% agreed

Germany

This food can reduce animal suffering.	68% agreed
This food can meet the needs of a rapidly growing human population .	63% agreed
This food will be able to feed people in countries with increasing demand for meat.	63% agreed
This food can be produced closer to selling points, limiting transportation .	63% agreed
This food avoids the risk of foodborne illnesses like E.coli and salmonella.	60% agreed

Italy

This food can reduce animal suffering.	75% agreed
This food will be able to feed people in countries with increasing demand for meat.	69% agreed
This food can be produced closer to selling points, limiting transportation .	69% agreed
This food can meet the needs of a rapidly growing human population .	68% agreed
This food allows for the customisation of protein products to make them healthier.	68% agreed
This food avoids the risk of foodborne illnesses like E.coli and salmonella.	67% agreed
This food can reduce the consumption of conventional meat, which is dangerous for human health .	63% agreed
This food is much faster to create than conventional meat.	61% agreed

Spain

This food can reduce animal suffering.	74% agreed
This food can meet the needs of a rapidly growing human population .	74% agreed
This food allows for the customisation of protein products to make them healthier.	74% agreed
This food will be able to feed people in countries with increasing demand for meat.	73% agreed
This food can be produced closer to selling points, limiting transportation .	71% agreed
This food avoids the risk of foodborne illnesses like E.coli and salmonella.	70% agreed
This food allows for the creation of new flavours, textures and recipes .	70% agreed
This food is much faster to create than conventional meat.	67% agreed

Consumer categories

From the results of the surveys, we identified three categories of consumers with different levels of acceptance of cultivated meat: ambassadors, challengers and critics.

Ambassadors were survey participants who knew what cultivated meat was, had a positive image of it, and would “certainly” or “probably” buy it.

Challengers didn’t know what cultivated meat was, had either a “rather positive” or “rather negative” image of it, were interested in learning more about it, and would “certainly” or “probably” buy it.

Critics knew what cultivated meat was, had a “very negative” image of it, and would “certainly not” buy it.

Below is more detail on the traits of the different consumer categories for each country.

France

Trait	All participants	Ambassador	Challenger	Critic
Female	52%	52%	59%	45%
Male	48%	48%	41%	55%
18-34 years old	26%	38%	37%	10%
35-49 years old	25%	29%	35%	13%
Over 50 years old	49%	33%	28%	77%
Income over €2,000 a month	60%	59%	55%	59%
Eats red meat at least once a week	60%	60%	55%	67%
Eats plant-based meat at least once a week	12%	25%	12%	6%
Has stopped or reduced red meat	45%	51%	48%	34%
Would definitely try cultivated meat	6%	26%	7%	0%

Germany

Trait	All participants	Ambassador	Challenger	Critic
Female	52%	42%	62%	58%
Male	48%	58%	38%	42%
18-34 years old	26%	35%	27%	5%
35-49 years old	28%	31%	30%	24%
Over 50 years old	46%	34%	43%	71%
Income over €2,000 a month	43%	46%	38%	37%
Eats red meat at least once a week	38%	46%	36%	31%
Eats plant-based meat at least once a week	19%	31%	9%	6%
Has stopped or reduced red meat	35%	37%	31%	32%
Would definitely try cultivated meat	15%	32%	8%	0%

Italy

Trait	All participants	Ambassador	Challenger	Critic
Female	52%	47%	54%	52%
Male	48%	53%	46%	48%
18-34 years old	24%	33%	28%	10%
35-49 years old	29%	31%	31%	26%
Over 50 years old	47%	36%	41%	64%
Income over €2,000 a month	36%	42%	37%	26%
Eats red meat at least once a week	64%	70%	66%	63%
Eats plant-based meat at least once a week	26%	39%	22%	12%
Has stopped or reduced red meat	42%	44%	39%	30%
Would definitely try cultivated meat	13%	32%	15%	0%

Spain

Trait	All participants	Ambassador	Challenger	Critic
Female	52%	48%	62%	58%
Male	48%	52%	38%	42%
18-34 years old	30%	40%	28%	17%
35-49 years old	28%	32%	29%	23%
Over 50 years old	42%	28%	43%	60%
Income over €2,000 a month	42%	42%	38%	37%
Eats red meat at least once a week	58%	62%	36%	31%
Eats plant-based meat at least once a week	27%	38%	9%	6%
Has stopped or reduced red meat	40%	44%	31%	32%
Would definitely try cultivated meat	14%	28%	8%	0%

Phase 3:

Focus groups

After reviewing the results of the quantitative surveys, we worked with native French, German, Italian and Spanish speakers from the cultivated meat sector to develop our approach to testing nomenclature and messages through focus groups.

In line with the objective of this project to develop effective nomenclature and messaging, and to ensure the conversation was productive, we decided to invite only ambassadors and challengers to the focus groups. While there would be value in trying to find messages that minimise opposition from people who would “certainly not” buy cultivated meat, we wanted to avoid conversations being derailed by people who were already opposed to the idea. We also felt that, particularly at this early stage in cultivated meat’s development, persuading people who were open to trying cultivated meat (potential “early adopters”) was likely to be more helpful for the sector.

Each focus group involved seven people who had not taken part in the quantitative survey: three ambassadors and four challengers, recruited based on their answers to relevant screening questions. All participants were meat eaters, with a range of ages between 25 and 65, living in a variety of regions, with a range of socio-economic backgrounds, and with a roughly even gender split. OpinionWay conducted the focus groups online via video call in April 2022 using the procedures and rules of the ISO 20252 standard.

Due to an error which meant that some nomenclature options were not discussed in the first French group, OpinionWay ran a second French focus group in November 2022 with new participants. Translation errors relating to the German and Italian groups were also rectified in November 2022.

We developed a relatively neutral description (below) of cultivated meat to introduce the topic and gather initial perceptions from the focus groups. We also developed questions designed to encourage participants to develop their own nomenclature and messages for cultivated meat, to test their perceptions of a shortlist of nomenclature options, and to understand whose opinions they would trust on this subject.

Responding to a description of cultivated meat

After introductions and a discussion of their existing meat consumption habits, the focus group participants were shown the following description of cultivated meat (translated into each language) and asked to respond to it:

“This food involves taking a small, harmless sample of cells from an animal and then growing them in what is known as a cultivator. The cultivator is a sterile environment which facilitates the same process that happens inside an animal by providing the cells the warmth and basic nutrients (water, proteins, carbohydrates, fats, vitamins and minerals) needed to grow and become meat. It is similar to growing plants from cuttings in a greenhouse. The result is an abundance of minced meat, identical to conventionally produced meat at the cellular level.”

France

Participants of the first French focus group were the most sceptical about the food described to them. For them, it appeared that food and scientific innovation did not sit well together.

However, for the second French group, the description evoked discussions of scientific progress, the positive benefits for animal welfare, and the potential of this food to feed a growing population. The description led the second group to spontaneously talk about “viande cultivée” and “viande de culture”.

The greenhouse metaphor worked well for both groups – making the process appear closer to the “natural way”, but supported by human intervention.

Germany

German participants immediately responded to the description by discussing the perceived benefits for animal welfare and human health (as they considered meat from intensive farms to be unhealthy), as well as talking positively about science and progress. They added that, because it is made from animal cells, this food would taste like conventional meat – unlike some plant-based options. Some participants mentioned the concept of cultivated meat, which they had heard about in the media.

The greenhouse metaphor also resonated with the Germans.

“It is meat, being produced without killing animals. I like that more than all these vegan patties.”

German focus group participant

Italy

Like the Germans, for Italian participants the description immediately evoked the perceived benefits of cultivated meat for animal welfare, as well as science and progress.

The greenhouse metaphor resonated with this group, with one participant saying “the meat you eat is the same as the one you had before, but the process to obtain it is like that of a cutting”.

Spain

Based on the description, the Spanish group oscillated between scepticism and curiosity, with some people distancing themselves from the scientific aspect. However, they too appreciated how the greenhouse metaphor made the process seem more “natural”.

Invented names

Next, the facilitators asked the groups to come up with a name for the described food that would encourage them to buy or eat it.

France

Ethical meat
Viande cultivée
Viande de culture

The first French group felt ethical meat suggested values like avoiding animal suffering and adhering to a code of ethics. Viande cultivée and de culture were suggested by the second group as familiar and appealing.

Germany

Next generation meat
Wonder meat

Two names were chosen by the German group, designed to show dynamism, evoke the world of startups and make the product sound wonderful. The group felt that a name in English was more attractive.

Italy

4.0 meat
Ecomeat

The Italian group developed English names to embody the modern dimension of the product. They wanted to evoke progress and innovation, as well as sustainability.

Spain

Cultivated meat

The Spanish group chose “cultivated meat”, as they felt reassured by its perceived reference to “natural production cycles” – similar to the cultivation of fruit and vegetables.

Nomenclature test

After discussing their own ideas, the groups were asked to respond to a list of potential names for the described food in their language.

Reflecting on the lack of clarity in the survey question on nomenclature, we ensured the focus groups were asked very clearly whether each of the terms given would make them want to try or buy this food, and why.

We also reflected on the suitability of the nomenclature tested in the surveys. We decided not to test the terms “alternative meat” and “meat” further because it was felt they did not provide adequate clarity or differentiation from plant-based and conventional meat.

Together with the native speakers from the sector, we narrowed down the list of terms to test with each focus group based on the survey results, what was likely to be used by companies and advocates, and what worked linguistically. For example, in Spanish there is no meaningful difference between the translations of “cultivated meat” (“carne cultivada”) and “cultured meat” (“carne de cultivo”).

When introducing each nomenclature option, the focus group moderators used the term “meat” alongside product-specific formulations such as “cultured chicken” or “cell-based beef” to demonstrate how it might be used in practice. The groups responded more positively to the product-specific formulations than to the generic term “meat”.

The table below sets out the key findings. Terms that were well received are highlighted in green, those with a mixed or neutral response are highlighted in yellow, and those that were received poorly are highlighted in red.

France

Term	Feedback
<p>Viande cultivée (cultivated meat)</p>	<p>Group 2: The term is received very positively, and carries very similar connotations to "viande de culture", with the idea of time, care, and by extension a healthy, organic product.</p> <p>Most thought this term was clear and appealing.</p> <p>For some, "viande cultivée" and "viande de culture" are synonymous.</p>
<p>Viande de culture (cultured meat)</p>	<p>Group 1: This term was mentioned spontaneously, and associated with positive connotations (the cultivation of plants, a natural process). However, it was less well evaluated than the terms that the respondents had invented themselves.</p> <p>Group 2: For the second group, “de culture” referred to the art of cultivation, and the care and time taken to produce the meat. They felt it encapsulated the metaphor of growing plants, fruits or vegetables. However, one person felt it evoked bacterial culture and infection.</p>
<p>Viande moléculaire (molecular meat)</p>	<p>Group 1: This term worked relatively well for the first French group, echoing the molecular cuisine of Thierry Marx – though some felt it had a “medical” resonance.</p> <p>Group 2: The second group responded similarly, but felt that the connection with molecular cuisine made it seem far removed from everyday life, and some said molecular cuisine had gone out of fashion.</p> <p>Some also felt it evoked the semantic field of chemistry, and most did not find it appealing.</p>

Germany

Term	Feedback
<p>Neues Fleisch (new meat)</p>	<p>This term seemed to be well accepted, conveying the idea of newness, but also of new recipes. In this respect, it responds to the curiosity of consumers while distinguishing itself from conventional meat.</p> <p>The term seems to be the favourite among the proposed names – but without much enthusiasm. The German group preferred the names they had invented themselves.</p>
<p>Kulturfleisch (cultured meat)</p>	<p>At first, the term was seen as similar to “kultiviertes Fleisch”, but on reflection, some differences emerged. Positively, the image of cultivation of foods like mushrooms was evoked. Negatively, some thought it was complex to understand for the consumer.</p> <p>The term was received differently by different people, so there was no consensus within the group over whether it was appealing.</p>
<p>Kultiviertes Fleisch (cultivated meat)</p>	<p>This term was seen as correctly describing the food, but was considered “boring” and lacking in creativity.</p> <p>While not associated with negative connotations, it was not seen as appealing.</p>
<p>Zelluläre Landwirtschaft (cellular agriculture)</p>	<p>This term evoked agriculture in a more general way, rather than meat specifically. It was also connected with the image of science, which presented a stark contrast with food and agriculture.</p> <p>The term was not considered appealing.</p>
<p>Zellbasiertes Fleisch (cell-based meat)</p>	<p>“Zellbasiertes” had connotations of hospitals and even science fiction.</p> <p>This term was firmly rejected.</p>

Italy

Term	Feedback
Carne coltivata (cultivated meat)	<p>This term was considered simple to understand, presenting an adequate description of the food – even if it wasn't seen as particularly innovative.</p> <p>For some, it evoked the cultivation of vegetables, and therefore the idea of a healthy food (one person thought it sounded healthier than conventional meat).</p> <p>The term was considered appealing to the Italian group.</p>
Agricoltura cellulare (cellular agriculture)	<p>This term was considered difficult to understand without additional context or explanation, and it was noted that the words did not refer directly to meat.</p> <p>For some, the term evoked the semantic field of biology, which created a distance from the idea of food.</p>
Carne cellulare (cellular meat)	<p>This term was too directly associated with the idea of science. The argument that all meat is made up of cells was also raised as a potential point of confusion.</p>
Carne colturale (cultured meat)	<p>For the majority of the Italian participants, this term too clearly evoked the semantic field of science, with negative associations.</p> <p>It was also seen as very technical and potentially divisive for consumers.</p>

Spain

Term	Feedback
Carne cultivada (cultivated meat)	<p>This term was mentioned spontaneously and positively by the Spanish group, who felt it evoked a natural process, like the cultivation of plants.</p> <p>In this respect, some felt it suggested the food was “healthy”, and the term was considered appealing.</p>
Carne sin sacrificio (slaughter-free meat)	<p>The idea of sacrifice or slaughter was violent and divisive for the Spanish group, who said it could evoke guilt for meat eaters.</p>

Spontaneous messages

Next, the facilitators asked the groups to generate their own messages about the possible benefits of the food described to them.

Message	Groups who mentioned it
Animal welfare: it has the potential to end animal suffering, intensive farming and slaughter	All countries
Environment: it could be produced in a sustainable way, saving resources and reducing CO2 emissions	All countries (second French group only)
Customisable: it could be modified to make it healthier	Germany, Italy, Spain
Growing population: it could meet the needs of a growing human population	France, Spain
Health: it could be healthier than conventional meat because it would be produced in a controlled environment and come from healthy animals who hadn't been treated with drugs	Germany, Italy, France (second group only)
Novelty: it evokes curiosity, and consumers will want to try a new product	Spain

There were also discussions of potential obstacles or concerns that must be overcome for the groups to adopt cultivated meat. The first French group found this exercise easier than the others, coming up with several obstacles spontaneously, while the Spanish group struggled to generate concerns.

Obstacle/concern	Groups who mentioned it
Taste: it must taste the same as conventional meat	All countries
Price: the price should be comparable to conventional meat – not so high as to be a barrier, but not so low as to imply it is of poor quality	All countries
Appearance: it must have the same texture, appearance and colour as conventional meat	All countries (especially important for France)
Information: there must be more information about the production method, the origin of the animal and how the cultivator works	France, Germany, Spain
Negative image: there was discomfort with the associated idea of “laboratory meat”, which is not produced “naturally”	France (first group only), Germany
Animal welfare: the donor animal must have been raised in a high-welfare environment	France (first group only), Germany
Quality: the first French group expressed concern that this could become a low-quality, industrially produced food, and wanted assurance that the donor animal is of a quality meat breed, ideally locally raised	France (first group only)
Traceability: the Italian and second French groups expected governments to regulate cultivated meat, and ensure the cells can be traced back to the donor animal	Italy, France (second group only)
Limited recipes: the description led the Italians to think cultivated meat can only take the form of minced meat, which is not suitable for some traditional recipes – particularly those involving meat on the bone	Italy
Nutrition: the Spanish group wanted cultivated meat to be nutritionally equivalent to conventional meat, particularly in terms of protein content	Spain

Message test

The groups were then asked to respond to a series of messages about the benefits of cultivated meat, which had been narrowed down and refined according to what was received well in the survey, as well as feedback from native speakers from the sector.

We decided not to test animal welfare messaging at this stage, because it resonated so well with the survey groups and was mentioned spontaneously by the focus groups. We felt it would be better to spend the focus groups' time diving into areas where there was less certainty over how messages would be received.

“This food reduces the impact of our food system on the **climate and uses fewer resources, such as water and feed, than conventional farming.”**

All countries: This message received support from all countries, as climate change and sustainability were a concern for all. However, they did ask for concrete data comparing the environmental impact of cultivated and conventional meat.

France: The first French group was the most demanding of additional information to back up this message – raising questions about the sustainability of the new infrastructure needed for the sector, and about whether the supply chain would be energy efficient.

“Very convincing – everyone knows there are less and less resources.”

German focus group participant

“This food would enable the **land currently reserved for livestock to be used for more sustainable purposes, such as planting trees or for renewable energy.”**

All countries: The idea of reforestation was well received, but the conversion of agricultural land for energy production was generally perceived more negatively, both in terms of aesthetics and a concern that wind and solar energy can have negative impacts on the environment. However, in the context of the energy crisis later in 2022, the second French group was supportive of using land for renewable energy.

Germany, Italy, second French group: This message was considered concrete and logical by the Italian, German and second French groups, adding to cultivated meat’s environmentally friendly appeal.

Spain: The Spanish group raised questions about what this would mean for farm animals and the conventional animal agriculture sector as a whole.

France: The first French group also raised concerns about the economic impact of the conventional animal agriculture sector, perceiving land use change to mean farmers would be expropriated.

“This food is antibiotic free, so it can help to reduce the risk of **antibiotic resistance.”**

Germany, Italy and Spain: The idea of using animals who have not been treated with antibiotics was particularly appealing, especially in Spain and Italy, as it indicated that cultivated meat will be safe. However, some participants did not know that farm animals are frequently fed antibiotics – which made the connection to antibiotic resistance less clear.

Italy: The Italian group was keen to see proof that cultivated meat really will be antibiotic-free.

France: Both French groups were taken aback by this message because it seemed so far removed from any discussion of food, and some participants questioned whether it was possible for the donor animal to have never been treated with antibiotics. The participants did find reassurance that cultivated meat would be healthy in the “antibiotic-free” part of the message – but thought this made more sense as a label on the product, rather than a standalone message.

“This food can meet the needs of a rapidly growing human population and help to satisfy **growing demand** for meat around the world.”

France and Spain: This message worked well for the French and Spanish groups, as it responded to their existing concerns about global population growth and potential shortages of meat. They agreed that cultivated meat would make it possible to get a head start in addressing these potential shortages.

Italy: The Italian group thought the message was positive, but didn't feel it was particularly relevant to them – appearing to address a global problem rather than a consumer need.

Germany: Some German participants questioned the premise that global population growth would lead to increasing demand for meat, given that plant-based meat options already exist. This topic appeared to be politicised in Germany, and the message would need to be backed up by data on growing demand for meat.

“This food prevents **overfishing** of certain endangered species.”

All countries: This message initially surprised all groups, as they hadn't considered it possible to cultivate fish – but it quickly became “logical” to them.

France and Germany: The German group and the first French group were particularly convinced, suggesting this would enable them to consume tuna and other rare fish more regularly without causing harm. Some participants also noted that the process would eliminate the risk of heavy metal contamination in seafood. The second French group received the argument positively, but didn't think it was as important as other messages.

Italy and Spain: These groups were less enthusiastic, feeling that existing laws already prevented overfishing, so this was a less important and urgent issue than the impacts of intensive animal agriculture. They also struggled to imagine eating minced fish, as the description did not explain that whole cut cultivated seafood products could be a possibility.

“I could eat as much scampi as I would like to!”

German focus group participant

“This food prevents diseases (such as avian flu) being spread from animals to humans, reducing the risk of **pandemics.”**

Germany, Italy and Spain: This message was generally considered convincing, evoking the Covid-19 pandemic and diseases such as mad cow.

France: This message provoked anxiety for the first French group, who did not want to hear about disease in the context of food as they believed eating is “a moment of pleasure”. The second French group felt this was an informative argument, but not a reason to buy the food.

Italy: The Italian group considered this message to be tautological and self-evident, and therefore superfluous.

Top messages

The below messages performed best with our focus groups. Please note that animal welfare messaging was not tested at this stage because it performed so well among survey participants and had already been spontaneously mentioned by the focus groups as a key benefit of cultivated meat.

France	Germany	Italy	Spain
1. Population	1. Environment	1. Environment	1. Antibiotic-free
2. Environment	2. Land use	2. Land use	2. Disease
3. Overfishing	3. Overfishing	3. Antibiotic-free	3. Population

Trusted voices

Finally, we asked the focus groups about the extent to which they would trust the following types of spokespeople if they were to talk about the food described to them. Items are highlighted in red, yellow or green in accordance with the level of trust from each group.

Spokesperson	France	Germany	Italy	Spain
Dietician / nutritionist	Trusted. “They are specialised.”	Trusted.	Trusted. “They are based on scientific data.”	Trusted.
Chef	Trusted.	Trusted. “Knows what has good quality.”	Trusted.	Trusted.
Scientist	Not trusted. “They are lobbies.”	Not trusted. “Everyone can call themselves an expert.”	Trusted. “Neutral.”	Trusted. Well positioned to talk about health impacts.
NGO	Possibly trusted, if proven to be independent.	Possibly trusted.	Possibly trusted.	Possibly trusted.
Consumer from another country	Possibly trusted, but mixed views on Americans.	Possibly trusted.	Possibly trusted, depending on the country.	Possibly trusted, depending on the country.
Personal doctor	Possibly trusted.	Possibly trusted.	Possibly trusted.	Trusted.
Journalist	Not trusted. “Not reliable.”	Trusted. “I would wish for an Arte documentary.”	Not trusted. “It’s easy to manipulate information.”	Not trusted.
Cultivated meat company	Not trusted. “It’s marketing and advertising.”	Not trusted. “Company is the last one [I’d trust].”	Not trusted. “Companies tend to hide what they do.”	Not trusted. “They will only say positive things.”
Politician	Not trusted.	Not trusted.	Not trusted. “I wouldn’t trust the government.”	Not trusted.

Conclusions

This project and its findings have made clear that communicating about cultivated meat in Europe requires cultural sensitivity and a tailored approach to each country. But if companies and advocates take the time to understand the audiences they want to reach, there is a significant potential market for this new way of making meat.

Our findings suggest there is strong awareness of the problems of industrial animal agriculture and a desire for change in all four of the countries studied – which cultivated meat is well-placed to address.

But as the sector develops and approaches commercialisation, it will be important to lean into the language of food and flavour – working with chefs and dieticians to show how cultivated meat can fit into European cuisines.

While the recommendations set out in this report should provide a useful framework for those planning to communicate about cultivated meat in France, Germany, Italy and Spain, there is plenty of scope for further research in this area.

Future projects could look at other European languages, focus on specific products or categories such as hybrid plant-based and cultivated meat, test a broader range of nomenclature and narratives, and focus in more detail on different consumer demographics.