

Exploring the future of meat:

Navigating complex topics for better decision making



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Publication: Future Food Reports 23 Published year: 2023, Uppsala Publisher: Swedish University of Agricultural Sciences, SLU Future Food Layout: Anna Maria Wremp, SLU Future Food Photos: Getty Images (pages 4 & 10), Thomas Zcebok (p 6), Shutterstock (p 8), European Parliament (p12), Fredrik Saarkoppel (p 13) ISBN: 978-91-8046-673-8 (print), 978-91-8046-675-2 (electronic) DOI: https://doi.org/10.54612/a.55n5kd18dl Copyright ©: CC BY-NC-ND 4.0 International This work is licensed under Creative Commons license attribution, non-commercial, no derivatives, 4.0 International, https://creativecommons.org/licenses/by-nc-nd/4.0/

About this report

This report, *Exploring the future of meat: Navigating complex topics for better decision making*, draws on insights gleaned from two years of producing the project The future of meat – story-telling and dialogues for improved decision making from 2021-2023, integrating lessons from expert interviews, podcast production, and facilitated workshops. The project was initiated by the SLU Future Food platform at the Swedish University of Agricultural Sciences (SLU), and developed and produced by TABLE, which is a food systems collaboration between the University of Oxford, SLU, and Wageningen University and Research.

How to cite this report

Kessler, M., Wahlström, A., Weiber-Post, H., & Carlqvist Warnborg, Y. (2023). Exploring the future of meat: Navigating complex topics for better decision making. Future Food reports 23, SLU Future Food, Uppsala.

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TABLE is a global platform for knowledge synthesis, reflective, critical thinking and inclusive dialogue on debates about the future of food. TABLE is a collaboration between the University of Oxford, the Swedish University of Agricultural Sciences (SLU) and Wageningen University and Research (WUR). For more information, visit: https://tabledebates.org/about

SLU Future Food is a platform that stimulates and develops cross-disciplinary research and collaboration for economically, ecologically and socially sustainable food systems. For more information, visit: https://www.slu.se/futurefood/

Project funding

The project *The future of meat – storytelling and dialogues for improved decision* making was funded by Formas – Swedish Research Council for Sustainable Development – within the 2021 Communications Call. Additional funding was also obtained from: The Oxford Martin School, Quadrature Climate Foundation, SLU Future Food, The Swedish University of Agricultural Sciences (SLU) and Wageningen University and Research.

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Foreword

This report draws on insights gleaned from putting together the project *The future of meat* – *storytelling and dialogues for improved decision making* from 2021-2023, integrating lessons from expert interviews, podcast production, and facilitated workshops. The project was initiated by the SLU Future Food platform at the Swedish University of Agricultural Sciences (SLU), and developed and produced by TABLE, which is a food systems collaboration between the University of Oxford, SLU, and Wageningen University and Research.

The aim of the project was to reflect on our own viewpoints and to foster mutual understanding and enhance the clarity of conversations around the role of meat and livestock in our societies and for our planet, rather than to intensify differences or argue over right and wrong. We also wanted to explore how stakeholders reach different conclusions and the implications of inaction.

The diverse experts we engaged in the project (see Appendix) each aimed to contribute to a 'good', sustainable, and equitable future for food. However, due to differing values, professional and academic trainings, and geographic contexts, visions for the future of meat and livestock vary, and this variation is often intensified by the way information circulates in "echo chambers" across media ecosystems.

As these experts articulated their visions, motivations, and pathways toward a sustainable food future, we learned that these varied viewpoints often complement rather than conflict with each other. Addressing multifaceted challenges like nutrition, biodiversity conservation, climate mitigation, animal ethics, and social justice indeed requires a spectrum of solutions. For example, rebalancing animal-sourced foods consumptions – increasing it in low- and middle-income countries and decreasing it in high-income countries – could improve health and environmental outcomes.

Thus, the project underscores the necessity of embracing diverse perspectives and engaging in meaningful dialogues, forming the basis of a well-rounded strategy for the future of meat and livestock. Recognizing that meat holds different meanings for different people is crucial in moving towards a more sustainable and healthy food system. Adopting an inclusive approach is key to reducing polarization and enhancing the quality of decision-making in this sector.

This report is thus divided into two main sections, each directed towards different target groups who contribute to a sustainable food future in different ways. The first section is intended for those with direct power to influence our food systems, including retailers, policymakers and food and agribusiness leaders. In that section, we offer key takeaways and highlight shared understandings and desires to inform decisions towards a more sustainable food future. The second section caters to educators and facilitators striving to improve the quality of dialogues on complex topics. Facilitating dialogues on complex topics is time and resource-intensive but pivotal for steering society toward a more sustainable, resilient, and just future.

As mentioned above, the key findings of the project stem from the contributions of a diverse array of experts including scientists, food producers, CEOs, policymakers, and civil society representatives from across the globe, ensuring that the evidence collected in the project is comprehensive and not restricted to perspectives from any single, like-minded group. However, some large-scale, efficient meat producers, whose insights we sought, opted not to participate. This report does not rely on a systematic or comprehensive review of the existing scientific literature on the topics covered. Instead, it synthesizes contributions from the wide range of thoughtful experts, each known for their long-standing experience in this field, who generously shared their knowledge for this project.

Finally, if you choose to apply learnings from our project in your work, we are eager to continue the conversation with you.

Annsofie Wahlström Program Manager at SLU Future Food SLU, November 2023



Why focus on meat and livestock?

Discussing the future of diets and farming invariably brings the role of meat and livestock into focus. This topic is sensitive, as meat means different things to different people. For some it's good protein, important cultural traditions and environmental stewardship (Leroy et al., 2022). For others it's environmentally damaging, an inefficient food source and needless animal suffering (Giraud, 2021; Lundmark, Berg, and Röcklinsberg, 2013). To foster more meaningful engagement and constructive dialogue in this and other complex topics, it's crucial to recognize that people enter conversations from different starting points. Regardless of our subjective perceptions of meat, we can't ignore the facts: current meat consumption places enormous pressures on the environment, with 77 percent of agricultural land (Ritchie and Roser, 2019) and an estimated 14.5 percent of global greenhouse gas emissions (Gerber et al., 2013) being attributed to livestock. On the other hand, meat also plays an important role in providing vital nutrients and sustaining the livelihoods of hundreds of millions across the globe.

How one views the "future of meat" often hinges on specific priorities – be they for zero hunger, climate change, biodiversity, animal

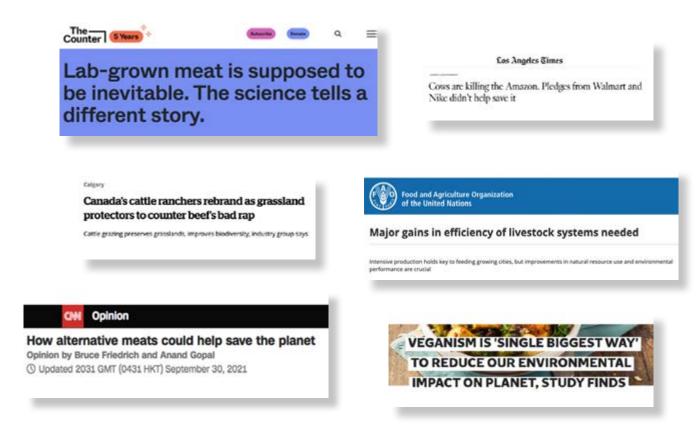


Figure 1. Several media headlines covering meat and livestock from 2019-2023.

welfare, public health, preserving culture and tradition, or economic growth. Based on these varied priorities, people frame the issues and potential solutions concerning the future of meat and livestock differently.

Unfortunately, much of the media discourse, primarily social media, overlooks these important nuances (see Figure 1), favoring sensationalistic and polarizing headlines instead. Such tendencies can push individuals deeper into their ideological corners, reinforcing pre-existing beliefs, and preventing constructive conversations. The result is often confusion about the best path forward, leading to paralysis in decision-making. Complex topics like the future of meat and livestock require a thorough, balanced, critical and transparent exploration. To achieve a more sustainable food future, the first section outlines project findings for policymakers, retailers, and food businesses. The subsequent section delves into lessons learned on navigating complicated debates and provides additional resources and insights for educators and facilitators.

One limitation of the process is that the series was not grounded in an exhaustive or extensive review of academic literature. However, its insights offer the advantage of immediacy. Our interviews serve as a rich source of expert knowledge, offering insights and reflections from stakeholders actively involved in ongoing discussions about the current and future state of meat.



For decision-makers

- Towards a sustainable and equitable meat future

The science is clear: while livestock can play an important role in our diets and farming systems, our current meat consumption, particularly in affluent countries, poses grave environmental and animal welfare challenges. With Earth's population surpassing eight billion in 2022 and heading towards ten billion, it is vital to reassess our relationship with meat and with animal farming.

To explore this complex issue, a podcast series *Meat: The Four Futures* engaged with 37 experts drawing from ten countries (see Appendix) working in industry, civil society, farming, policy and research. These four futures were adapted from the *Gut Feelings and Possible Tomorrows* (Garnett, 2015) report.

The aim was to dissect the different evidence and values-based arguments towards different meat and livestock futures and interrogate the impacts of different scenarios on the environment, health and society. These conversations, which were fact-checked and sense-checked by the latest research, have culminated in nine podcast episodes that gather diverse expert perspectives and distill their insights.

Below, we present key takeaways that emerged from the work resulting in this podcast series. With an especially diverse set of views, the following represents near consensus perspectives that could inform better decision-making on the future of meat:

Key take-aways

- The Western diet is unsustainable and unhealthy and shouldn't be a model for emerging economies. (*Ep 1. Elin Röös, Ep 2. Frédéric Leroy*)
- Meat can be highly nutritious (with the exception of processed meat) but is not essential for average adults. Moderation and diversity in diet are key. (*Ep 2. Frédéric Leroy, Ep 2. Rob Percival, Ep 7. Susan Jebb*)
- Deforestation driven by livestock, especially for feed crops, is detrimental to our environment.

(Ep 6. Gustav Johansson, Ep 6. Iain Tolhurst, Ep 9. Nils Österström)

- Livestock farming offers potential ecological benefits, but current large-scale practices often don't realize these benefits. (*Ep 5. Robert Barbour, Ep 5. Tristram Stuart, Ep 6. Hannah van Zanten*)
- Cultural ties and habits with meat eating are strong and influence consumption patterns, sometimes against evidence-based recommendations. (*Ep 5. Emma Kritzberg, Ep 6. Amy Fitzgerald*)
- Research and innovation are crucial to both improve the efficiency of existing livestock production (provided that animal welfare concerns are incorporated into those innovations) (*Ep* 3. Jude Capper, Ep 3. Jayson Lusk), as well as in developing alternative meat sources, including plant- and fungi-based meat substitutes. (All Ep 4: Isha Datar, Varun Deshpande, Jan Dutkiewicz, Steve Jurvetson, Nicole Rocque, Paul Shapiro)

The next section outlines success stories and essential insights from the podcast in promoting more sustainable food consumption and production. These sections underscore that each sector – policy, business, and civil society – can contribute to fostering a more sustainable food future. It's worth acknowledging that the podcast did not discuss the consolidation of corporate power in the livestock industry nor did we have meaningful conversations about the need for and role of regulation.

Informing better decision making

This project aim was to improve decision-making rather than prescribe specific actions for each decision-maker. This is because regional socioeconomic, political, and ecological contexts can vary significantly. In the following section, focus is placed on areas where there is consensus, bridging the divide in polarized discussions.

The future is uncertain. How fast will techno-



logical advancements develop? To what extent will we witness shifts towards more sustainable diets? At what pace will food production become more sustainable and resilient? These questions are not neutral. Policy interventions, coordination by food businesses, and advocacy from civil society will each play a pivotal role in nurturing a more sustainable food future.

Encourage sustainable consumption – for retailers and policymakers

Two things are clear. Our diets are insufficiently diverse, and we don't eat enough plants. We need to do more of both. As regards to meat's role, we don't need to eliminate meat from our diets – especially when it comes to populations with particular health needs such as the elderly (*Ep 2. Frédéric Leroy, Ep 2. Rob Percival*) – but rather to reduce it to sustainable and healthy levels.

The podcast emphasized several effective strategies for promoting a healthy and nourishing diet. These strategies begin with offering diverse product lines and extend to conducting educational campaigns that underscore the value of healthy eating. Notably, the implementation of policy actions that actively shape and influence the food environment stands out as a pivotal factor (*Ep 6. Susan Jebb*).

The food environment is the physical, economic, cultural, and political context within which people think about, obtain, and eat food. This context influences what people eat, how much, when, how often, and with whom. Political discourse,

Case Study – Lund University encourages sustainable food consumption in campus restaurants and food purchasing

The university strives to focus more on vegetarian/vegan alternatives, seasonal and eco-labeled/fair-trade ingredients and minimized use of disposable materials. Food suppliers must take the environmental impact into account when choosing ingredients/ foods, disposable items and packaging, as well as when transporting and waste sorting. (*Ep 5. Emma Kritzberg*)

planning policy, public transportation, and retail managers each play an important role in creating the conditions to make it easier for people to choose sustainable and healthy options.

Here are a few insights to promote sustainable and healthy choices while considering availability, cost, convenience, and quality:

- Nudging and choice architecture: Increase the availability and visibility of plant-based options in supermarkets, cafeterias, and canteens. For example you can position plant-based dishes first in buffet lines and utilize marketing techniques to highlight them as normal and appealing first choices. (*Ep 5. Emma Kritzberg, Ep 6. Susan Jebb*)
- **Re-evaluation of eco-labeling:** While ecolabeling has shown limited impact on shifting consumer behavior, it can influence food businesses by highlighting their environmental footprint, prompting them to offer more sustainable choices. (*Ep 6. Susan Jebb*)
- **Reassessing cultural norms:** Challenge the prevailing norms that equate meat with luxury or special events. It's essential to recognize that high-quality, top-notch meals can be vegetarian and environmentally friendly. Institutions should strive to set a precedent in this area. (*Ep 5. Emma Kritzberg, Ep 6. Amy Fitzgerald, Ep 6. Gustav Johansson*)

Promote sustainable production – for food businesses and policymakers

This section outlines three areas to promote more sustainable food production -1) encourage more sustainable livestock production; 2) develop the alternative protein sector, specifically plant- and fungi- based meat substitutes; and 3) increase production of vegetables, fruits and pulses for direct human consumption. While the objectives of the last two are clear, the first is often interpreted differently by different stakeholders.

There are two common arguments that were explored thoroughly in the podcast series about what is "better" and more sustainable livestock production:

"More from less"

If people continue to eat meat at the same rate as we do today, it's absolutely crucial to make



production as efficient as possible to use as few resources (eg. land, water, farm inputs including animal feed, etc.) while maintaining high yields. Precise nutrition and feeding, improved breeding and genetics, and feed additives that can potentially reduce methane emissions are each important to achieving a sustainable food future. Almost certainly, this effort infringes on animal welfare in service of less harm to the environment per kilo of animal raised. Although these principles are relevant to all types of livestock, they are most commonly associated with the production of poultry and pork. (*All Ep 3. Dirk de Koenig, Jayson Lusk, Judith Capper*)

"Less and better"

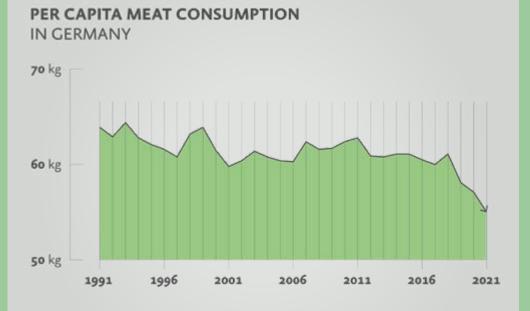
Can we have it both ways? Keep our meat, raise animals in more humane conditions, and utilize livestock's ability to both cycle nutrients and manage landscapes. This approach is only feasible if in fact people substantially cut back on how much meat they are consuming. This is because such systems require more land, and the animals emit higher greenhouse gases per kilogram of meat produced. Typically, "less and better" livestock sysCase Study - Denmark publishes national action plan for plant-based foods, following the investment of one billion DKK into The Plant Food supporting development of Plant-Based Foods

Denmark has set an important precedent by becoming the first country to publish an action plan showing how its citizens and economy can transition towards more sustainable plant-based foods. Europe is the world's biggest market for plant-based meat, and to take advantage of this growing industry – as well as to boost food security and create future-proof green jobs – other national governments across the continent should follow the Danish lead."

 Acacia Smith, Senior Policy Manager at the Good Food Institute Europe. (GFI Europe, 2023a)

Case Study - Germany reduces meat intake by 8 percent in 2022

With a significant decrease in average meat consumption to 52 kilos of meat per person per year and a surge in plant-based product sales to 1.9 billion euros in 2022, Germany serves as a model to reduce meat intake. Some contributing factors include the adoption of flexitarian diets, the rise of alternative meat products, and political leadership from key figures supporting reduced meat consumption. (GFI Europe, 2023b) *(Ep 8. Matthew Kessler)*



Sources: Federal Office of Agriculture and Food (BLE): Reported meat supply since 1991

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SOURCE: ALBERT SCHWEITZER FOUNDATION, 2022



tems focus on grazing ruminants like cattle, sheep and goats. (*Ep 3. Lars Appelqvist, Ep 3. Anders Gunnarsson, Ep 5. Robert Barbour, Ep 5. Kajsa Resare Sahlin, Ep 5. Tristram Stuart, Ep 5. Richard Young, Ep 5. Hannah van Zanten*)

Below is a list of other essential insights agreed upon by experts to promote more sustainable food production:

- **Deforestation free supply-chains:** Whether it's grazing cattle or soybeans grown to feed chickens and pigs, every expert agrees that we need to raise livestock without causing further deforestation. (*Ep 6. Gustav Johansson, Ep 6. Iain Tolhurst, Ep 9. Nils Österström*)
- Investment in alternative proteins: Public and private sector investment in a sustainable food future are crucial. The alternative protein sector won't develop and scale to become a viable alternative that can compete on taste, affordability and accessibility, without public and private financial support. While questions remain about the health impacts of these products, there is great potential to reduce the land and water footprints associated with these foods. (All Ep 4. Isha Datar, Jan Dutkiewicz, Steve Jurveston, Raychel Santo)
- Innovation in sustainable livestock: Foster partnerships between researchers, tech startups and food corporations to accelerate research

and development to increase productivity and reduce environmental harm of animal agriculture. (All Ep 3. Judith Capper, Dirk de Koenig, Jayson Lusk)

None of these goals can be achieved in isolation. Food systems researchers and civil society have long been advocating for action, but it's crucial for governments to actively demonstrate leadership in this area. The combined efforts of public and private funding, research and innovation, policy support, and entrepreneurial initiatives are essential.

Examples of comprehensive strategies to encourage sustainable production and consumption choices can be seen in the case studies from Denmark and Germany.

For a more detailed exploration of the scientific evidence and debates supporting different futures for meat and livestock, we recommend reading Meat, Metrics and Mindsets: Exploring debates on the role of livestock and alternatives in diets and farming (Breewood and Garnett, 2023).¹

¹ Helen Breewood, a writer at TABLE, and Dr. Tara Garnett, the director of TABLE, jointly authored and published this report in Spring 2023 concurrently with the release of the Meat: the four futures podcast series.

For educators

- Navigating debates on complex topics

Over the past two years, the *Meat: the Four Futures* podcast has delved into the multifaceted debate surrounding meat and livestock futures. We have uncovered layers of complexity, diverse perspectives, and important takeaways that can guide educators and individuals in conducting constructive conversations on contentious and complex topics.

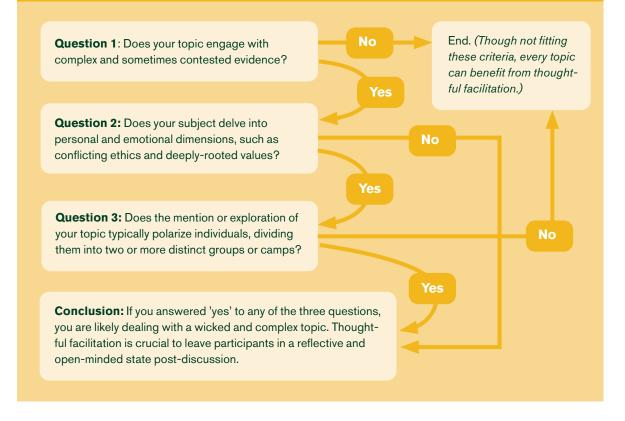
This next section is geared towards educators and facilitators and serves as a guide to navigate the handling of **wicked problems**, which are notoriously resistant to clear-cut solutions. Wicked problems are characterized by stakeholders having different or even opposing priorities, the scarcity of conclusive evidence, and that different factors are interconnected and influence each other in unpredictable ways.

Preparing facilitation of a "wicked problem"

Do you have a debate on a complex topic ahead of you? These topics require careful facilitation. Are you the right person or group to facilitate the conversation? Test this by going through the questions in the boxes presented below.

These boxes are adapted from the Wageningen University and Research Dialogue navigator tool (WUR, 2023) which offers valuable information for those looking to engage stakeholders into a dialogue process.

Identifying complex and wicked problems



Insights for educators and facilitators

To facilitate meaningful conversations on complex topics, consider the following tips and insights from the Meat: the Four Futures project:

- Acknowledge different starting points: Run activities that demonstrate how people enter these conversations from different backgrounds and perspectives. Creative tools like games and quizzes can lower the threshold for people to step into these discussions.²
- **Involve diverse voices:** Ensure a balanced representation of viewpoints and interests in the room, avoiding dominance by any one group.
- Encourage fact-based discussions: Misinformation can cloud any debate. Urge participants to back up their claims and distinguish between opinion, belief, and fact.
- **Project into possible futures:** Imagining shared futures can relieve some present tensions and emotions. Discuss potential positive drivers and vulnerabilities to understand and move towards better outcomes.
- **Transparency is key:** Complete impartiality is unattainable. Be open about your stance as facilitators to foster trust among the participants. Many of us hold complicated views on these topics and are not always consistent in theory and practice (think of the "meat paradox.")³
- **Prioritize active listening:** Often, the inclination in debates is to focus on formulating a counterpoint. However, we have found that genuinely listening to opposing views fosters empathy, diminishes polarization, and opens doors for potential common ground. Try to move from debates to discussions/conversations.
- Seek common ground: Even in disagreements, there is opportunity for shared understanding. Rather than focusing on what sets

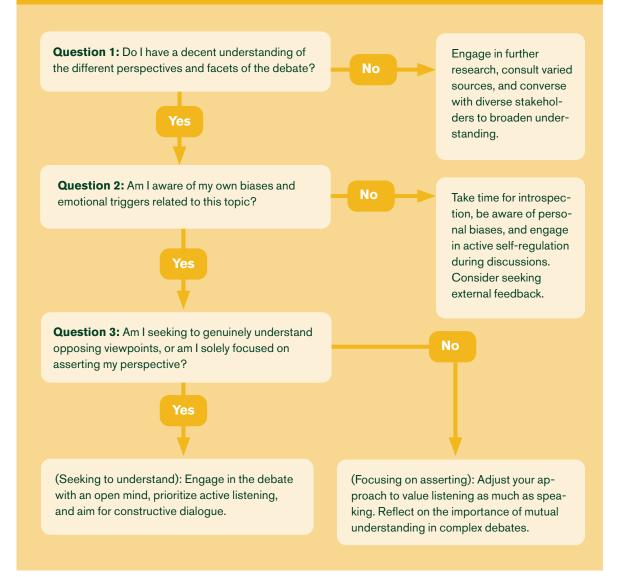
people apart, highlighting commonalities can help foster more constructive dialogues.

- Encourage reflection: After any debate or discussion, set aside time for participants to reflect on what they have learned, how their views may have evolved, and where they might have found unexpected commonalities, having taken in others' perspectives and new facts.
- Value emotional intelligence: Recognizing and managing emotional triggers in debates is essential. Emotional intelligence can prevent escalation and maintain focus on productive dialogue. One option is to employ the "STOP" technique:
 - ° **S**top:When you feel emotionally charged, stop for a moment.
 - **T**ake a breath: Take a few deep breaths to calm your physiological response.
 - Observe: Pay attention to what you're feeling and why. Identify the trigger without judgment
 - **P**roceed: Decide how to proceed in a way that aligns with your desired outcome.
- **Commit to continuous learning:** Phrases like "Current evidence suggests..." remind us that as new data emerges, the evidence-base informing the debate could shift. Stay open to new information with a willingness to adjust positions accordingly and also encourage participants to continuous learning after your event.

² The *Meat: the four futures* project developed a values-based quiz (https://tabledebates.org/quiz/), where participants respond to 20 statements reflecting various attitudes and beliefs about meat production and consumption. In workshops, we ask people to physically move across the room to represent different stances.

³ The "meat paradox" refers to the psychological conflict experienced by people who enjoy eating meat but also care about animal welfare. On one hand, many individuals like the taste of meat and see it as an important part of their diet. On the other hand, they may also be aware of the ethical and environmental issues associated with meat production, such as animal suffering and ecological impact. This creates a cognitive dissonance where individuals struggle to reconcile their dietary preferences with their moral and environmental concerns.

Before facilitating a debate on a complex topic, ask yourself these questions:



Additional resources

- Listen to the Meat: the Four Futures Podcast (https://tabledebates.org/meat/podcast)
- Do your values match your diet? Take the Values-based quiz (https://tabledebates.org/meat/quiz)
- Explore the Wageningen University and Research dialogue navigator tool (https://www.wur.nl/en/value-creation-cooperation/collaborating-with-wur-1/in-dialogue-finding-answers-together/wageningen-dialogues/how-to-use-dialogue-get-started/dialogue-in-research/ dialogue-navigator-tool.htm)

Further reading

For a more detailed exploration of the scientific evidence and debates supporting different futures for meat and livestock, we recommend reading:

- Meat, metrics and mindsets: Exploring debates on the role of livestock and alternatives in diets and farming. TABLE (Breewood, H., and Garnett, T., 2023)
- Meat and dairy production. Our World in Data (Ritchie, H., Rosado, P., and Roser, M., 2019)
- Gut feelings and possible tomorrows: (where) does animal farming fit? TABLE (Garnett, T. 2015)
- Tackling climate change through livestock A global assessment of emissions and mitigation opportunities. Food and Agriculture Organization of the United Nations (Gerber, P.J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., Falcucci, A. & Tempio, G., 2013).
- Disentangling the numbers behind agriculture-driven tropical deforestation. Science (Pendrill, F., Gardner, T.A., Meyfroidt, P., Persson, U. M., Adams, J., Azevedo, T., Bastos Lima, M.G., Baumann, M., Curtis, P.G. & West, C., 2022).

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Appendix

Episode	Expert	Country	Organization	Position
1	Tara Garnett	UK	University of Oxford	TABLE director
1	Elin Röös	Sweden	Swedish University of Agricultural Sciences	Food systems researcher
2	Vinsoun Millogo	Burkina Faso	Boni University	Director of Animal Sciences
2	Frédéric Leroy	Belgium	Brussels University	Professor in Food science
2	Rob Percival	UK	Soil Association	Head of Food policy
2	Nicole Rocque	India	Good Food Institute	Innovation specialist
3	Anders Gunnarsson	Sweden	Hålla farm	Owner and manager of farm
3	Lars Appelqvist	Sweden	HKScan Sweden	CEO
3	Dirk-Jan De Koning	Sweden	Swedish University of Agricultural Sciences	Livestock genetics researchers
3	Judith Capper	UK	Livestock Sustainability Consultant	Consultant
3	Jayson Lusk	USA	Oklahoma State University	Distinguished Professor and Head
4	Isha Datar	Canada	New Harvest	Executive Director
4	Varun Deshpande	India	Good Food Institute	Managing Director
4	Paul Shapiro	USA	Better Meat Co	CEO
4	Steve Jurvetson	USA	Future Ventures	Venture capitalist
4	Raychel Santo	USA	Johns Hopkins University	Food systems researcher
4	Hakeem Jimo	Nigeria	Veggie Victory	CEO
4	Nicole Rocque	India	Good Food Institute	Innovation specialist
5	Hannah Van Zanten	Netherlands	Wageningen University	Food systems researcher
5	Per Fredriksson	Sweden	Storegår´n i Kestad	Owner and farm manager
5	Kasja Resare-Sahlin	Sweden	Stockholm Resilience Centre	Food systems researcher
5	Robert Barbour	UK	Sustainable Food Trust	Policy advisor
5	Richard Young	UK	Sustainable Food Trust	Scientific director
5	Tristram Stuart	UK	Feedback / Toast Ale	Author and entrepreneur
5	Emma Kritzberg	Sweden	Lund University	Water and climate researcher
6	Susan Jebb	UK	University of Oxford	Professor diet and population health
6	Amy J. Fitzgerald	Canada	University of Windsor	Professor of sociology
6	Gustav Johansson	Sweden	Chou Chou	Head chef
6	Hakeem Jimo	Nigeria	Veggie Victory	CEO
6	Jan Dutkiewicz	USA	Harvard	Policy fellow
6	lain Tolhurst	UK	Tolhurst Organic	Farm manager
7	Charles Godfray	UK	University of Oxford	Head of Oxford Martin School
7	Bernice Bovenkerk	Netherlands	Wageningen University	Animal and environmental ethicist
9	Ola Broström	Sweden	Tebrito	Head of sales
9	Nils Österström	Sweden	Tebrito	CEO
9	Namukolo Covic	Ethiopia	ILRI	Director General's Representative to Ethiopia
9	Jonas House	Netherlands	Wageningen University	Food consumption researcher

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