

A Scoping Review of Consumer Perceptions of Meat Sustainability: A Focus on Animal Welfare
and Environmental Impact

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Abstract

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Background

Recent increases in meat production have marked the supply of relatively affordable meat, yet it has also heightened consumer scrutiny over environmental sustainability and animal welfare. Although there are a wealth of individual studies examining consumer concerns about the environmental and welfare impacts of meat production, a systematic mapping of the geographic distribution, methodological approaches, and conceptual dimensions of these studies has not been thoroughly conducted across the disciplines contributing to this research. To address this gap, this thesis conducted a scoping review of peer-reviewed literature spanning from 2010 to 2022 to systematically identify and characterize over a decade of research on consumer perceptions of meat sustainability.

Methods

This scoping review followed guidelines from Arksey and O'Malley and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-

ScR). Systematic searches were conducted in five databases spanning business and the biomedical, social, environmental, and agricultural sciences. The process included dual and multi-stage screening by two reviewers, a systematic data extraction process, structured content analysis of open-ended data to identify and organize emergent categories, and quantitative characterization of the included studies.

Results

Analysis of the 512 peer-reviewed articles included in the final set revealed a marked increase in studies on consumer perceptions of meat sustainability between 2010 and 2022. Across all global regions, more studies focused on consumer perceptions of animal welfare than environmental impact with research predominantly concentrated in Europe and Central Asia (n=288), followed by North America (n=87), East Asia, and the Pacific (n=71), and Latin America and the Caribbean (n=31). Studies assessing consumer perceptions of environmental impact commonly addressed broad issues like environmental degradation and general environmental sustainability, with specific environmental challenges such as climate impacts (n=108), pollution (n=46), resource use (n=45), and land use (n=44) more common in the research. In terms of animal welfare, topics such as housing (n=172) animal feed (n=108), mental and psychological well-being (n=106), animal ethics (n=176), as well as ethical slaughter (n=76) received the most attention after publications examining general animal welfare. The review also highlighted that consumer perceptions of meat sustainability have been studied alongside other social and economic sustainability concerns through varied perceptions and study designs including general survey research, preference elicitation methods, qualitative research, and behavior change research.

Discussion

This review highlighted that studies commonly address environmental impacts and animal welfare as part of broader sustainability discussions, with significant geographic variation reflecting regional influences on environmental and animal sustainability discourse.

Furthermore, researchers explored consumer perceptions through a spectrum of thoughts, feelings, and behaviors, using diverse methodologies to assess how these elements influence what consumers care about animal welfare and the environmental impacts of meat production.

To address these complexities, the review advocates for a nuanced, multidisciplinary approach to refine data collection and enhance the accuracy of consumer insights. On a practical level, these findings guide targeted strategies to improve policy and interventions, stressing the importance of local adaptability within global sustainability efforts. Additionally, the research calls for a cautious interpretation of consumer data to prevent overgeneralization and inefficacy in sustainability practices, emphasizing the urgent need for more comprehensive research in underrepresented regions to develop truly inclusive global strategies.

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Chapter 1. INTRODUCTION

1.1 BACKGROUND

The shift from traditional farming to industrial-scale production, which began in Western countries after World War II, has increased efficiency and food security to meet the rising global demand for food driven by population growth.^{1,2} However, this pivotal shift has proven to be a double-edged sword; while it has significantly revolutionized food availability, it has concurrently introduced substantial challenges in environmental sustainability, animal welfare, and human health.³⁻⁵ As global meat production has quadrupled since 1961, with cattle, poultry, and pigs constituting the majority of meat production worldwide, consumer perceptions regarding meat consumption and production have gained heightened importance due to growing concerns over the environmental, ethical, and health impacts associated with expansive and intensive meat production.⁶⁻⁸ Moreover, the world's population, projected to reach nearly 10 billion by 2050, is likely to drive a substantial increase in meat demand and consumption, prompting conversations about whether consumers should re-evaluate the role of meat in their diets.⁹⁻¹¹

As consumer awareness has sharpened, so too has the scrutiny over the sustainability of intensive meat production.¹²⁻¹⁴ Sustainability is multidimensional, with three core domains: — economic, environmental, and social. The expansion of livestock production has prompted consideration of its broader impacts: economically through agricultural livelihoods, costs to consumers, and efficiencies in the supply chain, such as reducing waste and streamlining production chain operations; environmentally through resource conservation and emissions

control; and socially through animal welfare, ethical labor practices, and community engagement.^{15,16}

Environmental impact, as a domain of sustainability, is a pressing concern, with consumers increasingly worried about the meat industry's role in climate change—highlighted by its greenhouse gas emissions and the extensive transformation of land and use of water for livestock and feed production—which has prompted researchers and consumers to question the long-term viability of current meat production practices.¹⁷ With up to a third of arable land used for livestock production and the related risks of deforestation particularly in the Amazon region, these environmental challenges have led consumers to reevaluate meat's place in the global food system.^{11,18} As a result, this broader discourse on sustainability mirrors these consumer concerns, often emphasizing the most visible environmental stressors such as greenhouse gas emissions, land use, and freshwater consumption associated with cattle production.¹⁹ However, some argue this focus on greenhouse gas emissions has been myopic, overlooking other environmental impacts of meat production such as biodiversity loss and eutrophication.²⁰

In addition, animal welfare, as a component of social sustainability, has become a focal point for consumers, alongside other social issues like labor and food acceptability, driven by both scientific interest and growing consumer concerns. Advancements in animal behavior and welfare research have enriched our understanding of the complex emotional and cognitive capacities of farm animals. This has led to increased recognition that these animals experience a spectrum of emotions, extending beyond mere pain to include joy and distress.²¹ More recently, consumer interest and academic research have shifted towards understanding the natural living conditions of farm animals, recognizing their quality of life as a crucial component of their welfare.^{22–26} Even among species, consumers prioritize some welfare concepts over others. For

example, consumers have a more positive perception of pig and cattle production, whereas broiler production is regarded by consumers as having the worst welfare.^{7,27,28} Consumer awareness and knowledge of these issues are significantly shaped by various media outlets, with television, the Internet, and newspapers serving as primary sources.²⁶ Media coverage plays a pivotal role in shaping public perception by frequently spotlighting the negative aspects of animal welfare. This exposure not only raises awareness but also stirs public concern over related health risks, such as Salmonella outbreaks, which are often associated with poor animal welfare practices.^{22–26,29–31}

From this point forward in the thesis, the discussion of sustainability will center on animal welfare and environmental impact, chosen for their increased visibility in consumer consciousness. These topics, which have transitioned from being ancillary considerations within research on drivers of food choice, are now integral to sustainability discussions. National panel surveys conducted by International Food Information Council (IFIC) since 2006 reveal that while earlier surveys asked consumers about their food production perceptions in the context of food safety (e.g., pesticide use), in the past decade there has been an increased focus on topics related to animal welfare and the environmental impacts of food production.^{32–38,39(p2),40–48}

Building on these historical shifts and consumer concerns, many stakeholders have taken an interest in the social-psychological factors driving consumers' meat-related food choices. For example, public health nutritionists and animal welfare and environment advocates may seek to influence meat-related food choices to advance broader goals related to healthy eating, social sustainability, or climate change mitigation. Stakeholders in the livestock industry—including meat producers, trade associations, and corporations—may be driven by the dual goals of sustainability and efficiency as they respond to evolving market demands.^{20,49,50} These

stakeholders carefully examine market dynamics to strive toward meeting consumer demands for sustainably produced and high-quality meat products without compromising sustainable practices, in addition to fine-tuning marketing strategies and aligning with regulatory expectations.^{51,52}

While progress has been made in understanding consumer perceptions of sustainable meat production, there are still several gaps and limitations that need to be addressed.⁵³ A significant knowledge gap exists in comprehensively understanding consumer perceptions of meat's environmental impact and animal welfare, which has yet to be thoroughly explored across multiple disciplines.⁵³ Understanding the landscape of how consumer perceptions of meat sustainability have been studied would enable better coordination of research across different disciplines, improved translation of evidence into action, and ultimately, more effective strategies for promoting sustainable meat production and consumption.

1.2 OBJECTIVES

Given the heterogeneous and interdisciplinary nature of studies on the consumer perceptions of the sustainability of meat production, an extensive literature review is warranted. The overarching goal of this thesis is to systematically characterize the landscape of existing research on consumer perceptions of pork, beef, and chicken sustainability, with a focus on animal welfare and environmental impact as two important components of sustainability. To provide a comprehensive understanding of the current state of research in this area, I conducted a scoping review of peer-reviewed literature published between 2010 - 2022 with the following specific aims:

1. To identify and characterize **concepts and constructs** used to study consumer perceptions of meat sustainability, animal welfare, and environmental impact (the "what").
2. To identify and characterize **methodological approaches** used to study consumer perceptions of meat sustainability (the "how").
3. To identify and characterize the **geographic distribution** of existing research on consumer perceptions of meat sustainability (the "where").

Chapter 2. METHODOLOGY: SCOPING REVIEW

2.1 SCOPING REVIEW BACKGROUND

A scoping review is a methodical and comprehensive form of literature review designed to map the scope of existing research evidence on a given topic. The primary objective of a scoping review is to identify knowledge gaps, highlight key issues, and point out potential directions for forthcoming inquiries.^{54,55} Its growing acceptance as a rigorous methodology can be observed in the sharp increase in publication rates across different disciplines. From 1999 to 2014, there were 494 scoping reviews published, with an impressive 45% of these emerging after 2012, predominantly from North American and European researchers.^{56,57}

Scoping reviews are part of broader knowledge synthesis methods, which include systematic literature searches such as systematic reviews, rapid reviews, meta-analyses, and meta-syntheses, and non-systematic literature searches such as narrative, integrative, and critical reviews. Each type of review is distinguished by its unique focal point and methodological implementation.⁵⁸ It is crucial to acknowledge that despite the preliminary implications of the term 'scoping,' these reviews are rooted in a systematic process that parallels the rigor of systematic reviews. Both scoping and systematic reviews comprise well-defined steps, including conducting systematic literature searches, applying stringent inclusion and exclusion criteria, methodically extracting data, and adhering to the established PRISMA reporting guidelines.⁵⁷

While both scoping reviews and systematic reviews are grounded in systematic methodologies, they are differentiated primarily by their scope. A scoping review offers a preliminary assessment of the size and scope of available literature on a specific topic, whereas a systematic review scrutinizes the quality of evidence and synthesizes data from studies with high homogeneity to address narrowly defined research questions.^{54,58,59}

2.2 HISTORY AND DEVELOPMENT OF THE SCOPING REVIEW METHODOLOGY

Since the early 2000s various methodological frameworks and guidelines have been developed, each contributing to the evolution and refinement of scoping review methodology.^{55,56,59,60} Arksey and O'Malley⁵⁴ introduced one of the earliest and most widely used methodological frameworks for scoping reviews. Their framework comprised five stages: identifying the research question, identifying relevant studies, study selection, charting the data, and collating, summarizing, and reporting the results. While this seminal work laid the foundation for scoping reviews, it also left room for further development and refinement.

Levac et al.⁶¹ addressed some of the limitations in Arksey and O'Malley's framework by providing additional guidance and clarification for each stage of the scoping review process. Their recommendations emphasized the importance of an iterative approach, engaging relevant stakeholders, and incorporating a consultation exercise to enhance the rigor and relevance of scoping reviews. Daudt et al.⁵⁶ further advanced the scoping review methodology by sharing their experience of conducting a large, inter-professional scoping review using Arksey and O'Malley's framework. They highlighted the importance of a clearly defined research question, a comprehensive search strategy, and a systematic approach to study selection, data extraction, and analysis.⁵⁶

Building on these earlier works, Peters et al.⁶² provided more explicit guidance for conducting systematic scoping reviews. They emphasized the need for a transparent and reproducible methodology, offering practical recommendations for each step of the review process, including the development of an a priori protocol and the use of standardized tools for data extraction and synthesis. In 2018, Tricco et al.¹⁶ developed the PRISMA extension for scoping reviews (PRISMA-ScR), which further enhanced the transparency and consistency of

the scoping review methodology. PRISMA-ScR is an adaptation of the widely accepted PRISMA Statement, specifically tailored for scoping reviews, providing a 20-item checklist to ensure a comprehensive and transparent reporting of the review process and findings.⁵⁹

More recently, Pollock et al.⁶⁰ contributed to the refinement of scoping review methodology by offering recommendations for the extraction, analysis, and presentation of results in scoping reviews. Their guidance aimed to promote a more consistent and rigorous approach to data extraction and synthesis, ultimately enhancing the quality and utility of scoping reviews across various disciplines.⁶⁰ All these methodological advancements have strengthened the credibility of scoping reviews as a valid research approach and provided researchers with the necessary tools and guidance to conduct comprehensive and systematic scoping reviews in their respective fields.

2.3 PROCEDURE

This scoping review followed the reporting guidelines from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR).⁵⁹

During the study selection stage for this scoping review, there was no requirement for protocol registration, and databases such as PROSPERO—an open repository for systematic review protocols—did not accept submissions of scoping review protocols at the time it was conducted.

As a result, this scoping review was not registered publicly.^{63,64}

2.3.1 *Identifying the Research*

2.3.1.1 Operational Definitions and Conceptualization

Guided by the research questions and aims presented in the background section, this scoping review was motivated by the observation that some sustainability-related issues have garnered

more attention than others. For consistency throughout all stages of the scoping review, we established operational definitions of 'consumers,' 'perceptions,' 'meat,' and 'sustainability.' In this scoping review, 'consumers' referred to members of the general public, in order to capture a broad spectrum of individuals engaged with meat consumption, without limiting the definition to specific subpopulations like active purchasers or certain stakeholders or professionals (**Table 1**). The term 'perceptions' encompassed concepts such as attitudes, behaviors, knowledge, preferences, values, choices, or decisions—enabling a holistic exploration of multiple ways that consumers interact with meat or think about meat sustainability. 'Meat' included beef, pork, and chicken (broilers), while studies on the production of eggs, dairy, other animal species or products, or non-animal products were included only if they also included beef, pork, or broiler chickens. The concept of sustainability includes multiple components as described in the introduction; for the purposes of this scoping review, 'sustainability' was operationally defined as environmental impact or animal welfare. These dimensions were emphasized in recognition of their salient role in consumer studies and their relevance as areas of particular concern and ongoing discussion about the sustainability of meat production practices. ^{32–38,39(p2),40–48}

Table 1. Operational definitions and inclusion/exclusion criteria

Criteria	Inclusion criteria	Exclusion criteria
Language	English publications	Non-English publications
Publication date range	Jan 2010 to December 5, 2022	Anything published before Jan 2010 or after December 5, 2022
Publication type	Journal articles or grey literature (including reports and white papers)	Conference abstracts, dissertations/theses, book chapters, or review articles
Geographic setting	All geographic locations and scales	
Participants	Studies of consumers, defined as members of the general public. Included consumers of all age groups and demographic characteristics.	Studies on subpopulations that do not represent the general public, such as food industry actors (e.g., producers, processors, retailers),

		policy actors (e.g., government agencies), or specific professions (e.g., veterinarians, medical professionals).
Study designs	All study designs, as long as they examined consumer perceptions, defined as how people think about and make choices related to meat , and could include acceptance or approval, ability, attachment, attitudes, awareness, barriers or motivations, behaviors or norms, beliefs, choices, considerations, dilemmas, complaints, concerns, decisions, demand, satisfaction, evaluation, identity, importance, influence, interest intention, knowledge, liking, opinions, preferences, emotional response, neural responses, roles and responsibilities, support, trust, understanding values, views, willingness, general perceptions, or related concepts.	Studies with no empirical data; studies that did not examine any of the included constructs; studies that evaluated policies or media without assessing how consumers interacted with these materials; studies that evaluated meat reduction interventions without evaluating consumer perceptions; or studies that used consumer perceptions as inputs for scenario modeling without also assessing those perceptions
Meat	Studies involving meat, defined as beef, pork, and chicken (broilers) . Studies involving other foods were included if they also included meat. Studies were included if they focused on consumer perceptions of aspects of meat value chains (such as production, processing, transportation, retail, media, policies, or cultural factors) that might influence how consumers view meat products.	Studies focused solely on other species (e.g., sheep, goats, rabbits), animal source foods (e.g., dairy, eggs), or meat alternatives (e.g., plant-based foods, hybrid meats) that do not also include meat; studies of cows, pigs, or chickens outside of agricultural contexts (e.g., as pets); studies focused solely on meat packaging.
Sustainability	Studies involving sustainability, defined as environmental impacts or animal welfare considerations . Environmental impact considerations included climate change, land use, water and air quality, biodiversity, and waste management. Animal welfare considerations included	Studies focused solely on economic or social sustainability issues unrelated to animal welfare or environmental impacts; philosophical discussions of ethical issues unrelated to consumer perceptions; or studies on antibiotic use outside of meat production contexts.

breeding, housing, health, handling,
transport, and slaughter.

2.3.2 *Identifying the Relevant Studies*

To ensure a focused and relevant collection of data for this scoping review, inclusion and exclusion criteria were established (**Table 1**). This scoping review included English language materials published between January 2010 and December 2022 (when the systematic search was conducted). This timeline aligns with the scope and relevance of the animal welfare and environmental constructs defined in the background section of this review, which highlights the transition of these topics from ancillary considerations within food safety to integral elements of sustainability discussions, as evidenced by national panel surveys conducted by IFIC since 2006.^{32–38,39(p2),40–48} Whereas peer-reviewed academic publications were included, conference proceedings, abstracts, dissertations, theses, book chapters, dietary guidelines, and review articles were excluded from the study. In addition, articles from all geographic regions and scales were included.

Systematic literature searches were conducted in five databases: EBSCO Psych Info, EBSCO Business Source Complete, PubMed, Web of Science, and ProQuest's Agricultural and Environmental Sciences collection. All five databases were able to retrieve peer-reviewed scholarly publications, and EBSCO Business Source Complete and ProQuest's Agricultural and Environmental Sciences Collection were also able to retrieve trade journals and market research reports in addition to academic articles. These five databases were chosen based on their scope of articles in the fields of biomedical sciences, social sciences, environmental sciences, agriculture, and business which would provide a diverse range of perspectives on the research question. The systematic literature search strategy was developed and refined by the project team in

collaboration with a librarian. **Appendix A** details the final search strategies used in all five databases. In each database, we ran two separate searches related to consumer perceptions of sustainable meat production: one with terms related to environmental impact, and one with terms related to animal welfare. All search results were limited to titles and abstracts, operating under the assumption that studies central to the core concepts would feature these concepts prominently in their summaries. The searches were conducted on December 05, 2022. The results were imported into EndNote X9⁶⁵, which was used to remove duplicates before uploading to Rayyan for title and abstract screening.

2.3.3 *Study Selection*

Screening occurred in three stages—title screening, abstract screening, and full-text screening. Each stage began with a calibration exercise in which three members of the project team each screened the same 100 titles, 10 abstracts, or 10 full-text articles, discussed discrepancies, and refined a set of common screening guidelines before the screening began. Two independent screeners reviewed each title and abstract in Rayyan,⁶⁶ with their decisions kept blind to one another. The team then transitioned to Covidence⁶⁷ for full-text screening, maintaining the same independent and blinded review process with dual reviewers.

The transition to Covidence for full-text screening was based on its efficiency in simplifying the importation and management of full texts and data extraction. While we did not employ formal inter-rater reliability tests, the screening team, which included additional project members, held weekly meetings over 12 months to deliberate on challenging articles or conceptual issues, reconcile any discrepancies in article selection, and refine the screening guidelines. This collaborative and adaptive approach was essential for maintaining consistency as the diversity of the study types and research within the field became more apparent.

2.3.4 *Charting the Data*

Data extraction was carried out in Covidence, a platform that facilitated a structured and efficient review. The template for data extraction was created in line with the objectives of the scoping review, focusing on capturing essential information related to consumer perceptions of sustainability in meat production. The primary fields for data extraction encompassed the geographic location and scale of the studies, the types of meat investigated, and the role of meat within the research articles, including whether it was studied in isolation or in conjunction with other foods such as meat analogs, plant-based foods, or other animal-based foods.

Additionally, we extracted information on participant characteristics; the nature of consumer perceptions examined; study design (methods of data collection and analysis); and specific concepts related to environmental impact, animal welfare, or other elements of sustainability. Two independent extractors conducted data extraction. Due to the extensive number of studies, a full dual-reviewer extraction was not feasible. Therefore, only those articles that prompted questions regarding the extraction process or fields were discussed at weekly team meetings for clarification.

2.3.5 *Collating, Summarizing, and Reporting the Results*

Following data extraction, all data were analyzed. Data synthesis began with a descriptive frequency analysis of the predefined categories, which were: geographic location and scale of the studies, types of meat studied, specific types of meat analogs, meat hybrids, other animal source foods, plant-based foods compared to meat, the role of meat in the study, and participant characteristics.

Open-ended data extraction fields regarding the consumers' perceptions, study designs, and specific concepts related to environmental impact, animal welfare, or other aspects of

sustainability were then subjected to the inductive content analysis method as delineated by Elo and Kyngäs.⁶⁸ This qualitative analysis commenced with open coding, wherein the open-ended text entries were read, and initial themes extracted to denote key points of interest. After this, the themes were organized into emergent categories and abstracted to form higher-order headings, thus capturing the thematic essences of the data.⁶⁸ This inductive approach enabled the identification of common categories and their interrelationships, ensuring the data's complexity was faithfully represented. The results from the inductive analysis were discussed with the research team to ensure accuracy and reliability. These standard categories were then applied to the extracted open-ended data, which enabled the quantitative characterizations of the studies.

Chapter 3. RESULTS

3.1 OVERVIEW AND TRENDS OVER TIME

This scoping review included 512 peer-reviewed articles, with the study selection process summarized in **Figure 1**, the PRISMA-ScR flow diagram. **Appendix B** shows authors and publication information for all included articles. In this results section, some of the frequencies or proportions are described in terms of the number of publications, and some are described in terms of the number of *instances*. For example, we describe the number of *publications* per year because each publication was associated with a single year, but we describe the number of *instances* of studies focusing on specific types of perceptions, for example, because a single publication could be relevant to multiple types psychological and social constructs such as attitudes, decision, and trust. For characteristics presented in terms of *instances*, the cumulative number of instances will be larger than the number of publications.

An analysis of the trends over time, as illustrated in **Figure 2**, revealed a noticeable increase in the number of published studies related to consumer perceptions of meat sustainability between 2010 and 2022. Out of the 512 academic articles reviewed, nearly half (246 studies, or approximately 48%) were published after 2020. During the examined period (2010-2022), the research focus varied, with studies studying consumer perceptions of only animal welfare (n=194) exceeding those studying consumer perceptions of only environmental impacts (n=110) (**Figure 2**). The number of studies focusing on animal welfare increased beginning in 2015. Publications focusing on environmental impact alone did not see an increase until 2019, and only in 2022 did publications on environmental impacts exceed those on animal welfare. Additionally, Of the 208 publications between 2010 and 2022 that examined both animal welfare and environmental impact, 153 (74%) were published after 2018.

Looking at the distribution of studies focused on various meat species, there was similar coverage across beef, pork, chicken, and unspecified red meat. Of the studies examining environmental impact, unspecified red meat (which included terms such as "red meat," "meat," "livestock," or "farm animals") was the most frequently studied (n=143 studies, 44.97%), followed by beef (n=125 studies, or 39.31%), pork (n=109 studies, or 34.28%), and chicken (n=84 studies, 26.42%). In contrast, among the publications examining animal welfare, the most studied species was pork (n=174 studies, or 43.28%), followed by beef (n=137 studies, 34.08%), unspecified meat categories (n=133 studies, or 33.08%), and chicken (n=22 studies, or 30.35%).

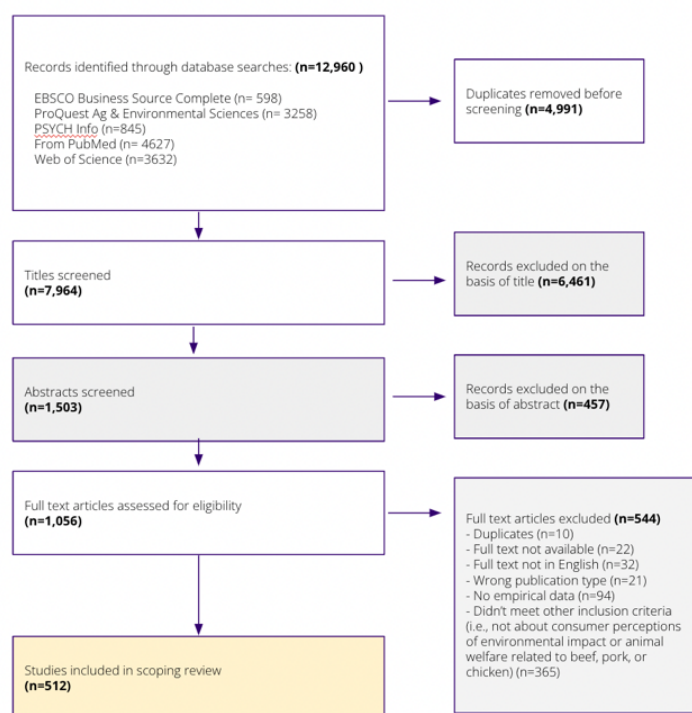


Figure 1: PRISMA-ScR Flow Diagram illustrating the study selection process.



Figure 2: Frequency of publications per year: Total, and disaggregated by focus on animal welfare or environmental impact

3.2 GEOGRAPHIC TRENDS

Studies of consumer perceptions of meat sustainability between 2010-2022 show a clear concentration of consumer research in specific regions. The bulk of studies included were notably centered in Europe and Central Asia (n=288), followed by North America (n=87), East Asia and the Pacific (n=71), and Latin America and the Caribbean (n=33). Comparatively, there were fewer studies without a specified geographic focus (n=19), those encompassing multiple regions (n=12), as well as in South Asia (n=8), Sub-Saharan Africa (n=3), and the Middle East and North Africa (n=2). Most of these regions mirrored the overall trend where studies focusing on animal welfare were more common, except in the Middle East and North Africa where all

studies focused on environmental impacts, and in Sub-Saharan Africa where all studies focused on animal welfare concerns (**Figure 3**).

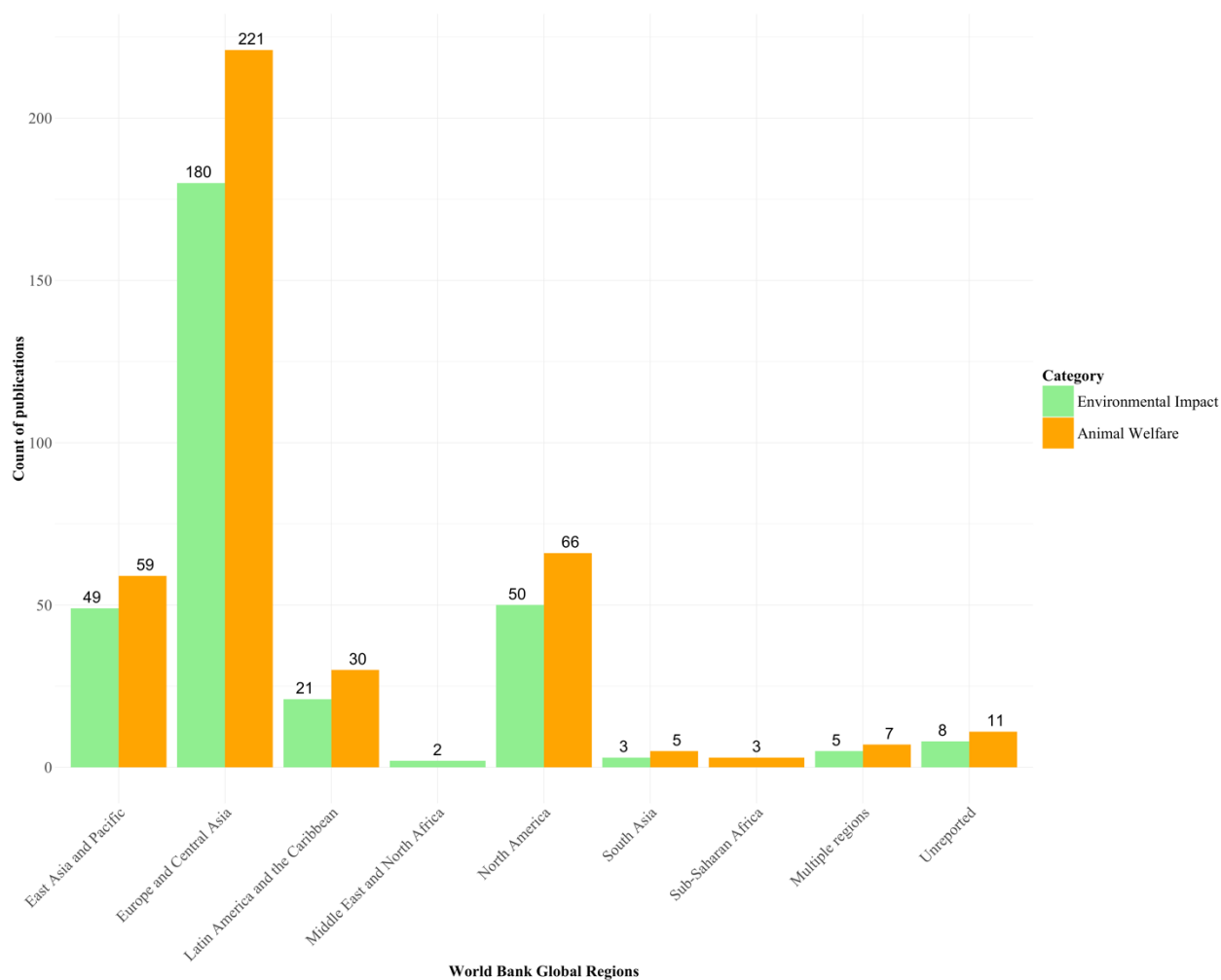


Figure 3: Frequency of publications by global region: disaggregated by study focus on animal welfare or environmental impact

3.2.1 *Geographic trends over time*

A closer examination of geographic trends in research focus across these regions between 2010 and 2022, as illustrated in **Figure 4**, highlights that Europe and Central Asia, along with North America, demonstrated consistent engagement in consumer studies of animal welfare

perceptions, with Europe experiencing notable fluctuations around 2014 and 2017, and North America displaying varied activity levels with an ebb and flow pattern, including a decrease from 2010 to 2013, resurgence in 2014, sustained increase from 2016 to 2018, decline in 2019, and recovery through 2022. On the other hand, East Asia and the Pacific and Latin America and the Caribbean regions showed intermittent fluctuations with a general upward trend after 2017 in studies related to consumers’ animal welfare perceptions. Similar patterns are observed in publications on environmental impact, with Europe and Central Asia showing persistent interest, including a dip in 2017 followed by a recovery, while East Asia, North America, and Latin America and the Caribbean demonstrated an increased engagement from 2017 onwards.



Figure 4: Frequency of Animal welfare (top) and Environmental Impact (Bottom) publications by region from 2010 to 2022

3.2.2 *Regional Priorities in Environmental Sustainability*

The majority of publications examining environmental impact (n=318) addressed general environmental impact (n=222), focusing on broad concerns such as environmental degradation, sustainability, naturalness, environmental impacts, and environmental friendliness. However, unlike animal welfare research, where general concepts were integrated with other constructs rather than being studied alone, publications on the environmental impacts of the meat industry predominantly emphasized standalone general impact assessments, and specific environmental topics were relatively less emphasized (**Figure 5**). Specifically, 145 publications solely addressed these general environmental impacts, compared to 77 that explored this in conjunction with other environmental sustainability topics. On the other hand, there were 80 publications focused exclusively on general animal welfare, whereas there were 175 publications combining general animal welfare with other, more specific animal welfare constructs.

Due to the limited number of publications in South Asia, the Middle East and North Africa, Sub-Saharan Africa, Multiple Regions, and unreported regions establishing trends of the environmental topics prevalent in these regions was difficult. Therefore, the remainder of this section and **section 3.2.3** focus on describing the trends in the remaining regions. Across all regions, discussions on the **climate impacts** (n=108), **pollution** (n=46), **resource use** (n=45), and **land use** (n=44) associated with meat production were more common. The research priorities across different regions revealed distinct patterns. North America displayed a substantial focus on **climate impact** studies, accounting for 38.0% of the region's publications addressing consumer-related environmental perceptions but had the lowest proportion of their environmental-focused consumer research on general environmental impacts compared to other

regions. Europe and Central Asia also like North America devoted their consumer research on environmental impacts to **climate impacts** with 63 publications, but the region devoted the least of its attention to examining consumer perceptions of **pollution** compared to other regions. Latin America and the Caribbean, meanwhile, focused its environmental research primarily on consumer-related discussions on land conversion, deforestation, and landscape preservation (**land use**) and **resource use**, surpassing the region's studies on **climate impacts**. Additionally, Latin America and the Caribbean had the highest proportion of studies on livestock pollution impacts compared to their total environmental research, with these studies making up 23.8% —a higher proportion than observed in any other region. East Asia and the Pacific, while showing moderate attention to all categories, had a relatively higher share of their environmental-focused consumer research on **general environmental impacts** and a lower focus on specific topics such as **resource use**, **land use**, and **climate impacts** compared to other regions. This region also placed more emphasis on consumer research on **pollution** compared to Europe and Central Asia, with 18.4% of its publications examining environmental impact devoted to **pollution**. Of the publications examining **general environmental impact** in East Asia and the Pacific, 27 publications examined general environmental impact alone and 13 explored consumers perceptions of general environmental concepts alongside other farm animal environmental impact topics.

Meanwhile, topics that were less commonly studied across all regions were discussions on ecological footprint and biodiversity conservation (**'ecosystems'**: n=28) meat packaging and farm animal waste management including manure storage (**'waste'**: n=19), renewable energy use, and fossil fuel consumption for transportation (**'fossil fuel and energy use'**: n=18), the use of environmentally harmful grains as livestock feed, and the adoption of alternative

environmentally friendly feed sources (**‘feed source’**: n=16), the environmental impacts of fertilizer and pesticide application (**‘agrochemical use’**: n=12), along with consumer discussions on soil degradation, erosion, desertification, and the management of soil health (**‘soil quality’**: n=7). However, some regions demonstrated a notable focus on the least prevalent specific topics. Specifically, compared to other regions, Latin America and the Caribbean majorly examined consumer perceptions on **agrochemical use, waste management, fossil fuel and energy use, and feed sources**. In contrast, discussions on **ecosystems** were predominantly studied in Europe and Central Asia, followed by Latin America and the Caribbean, and East Asia and the Pacific (n=2, 4%).

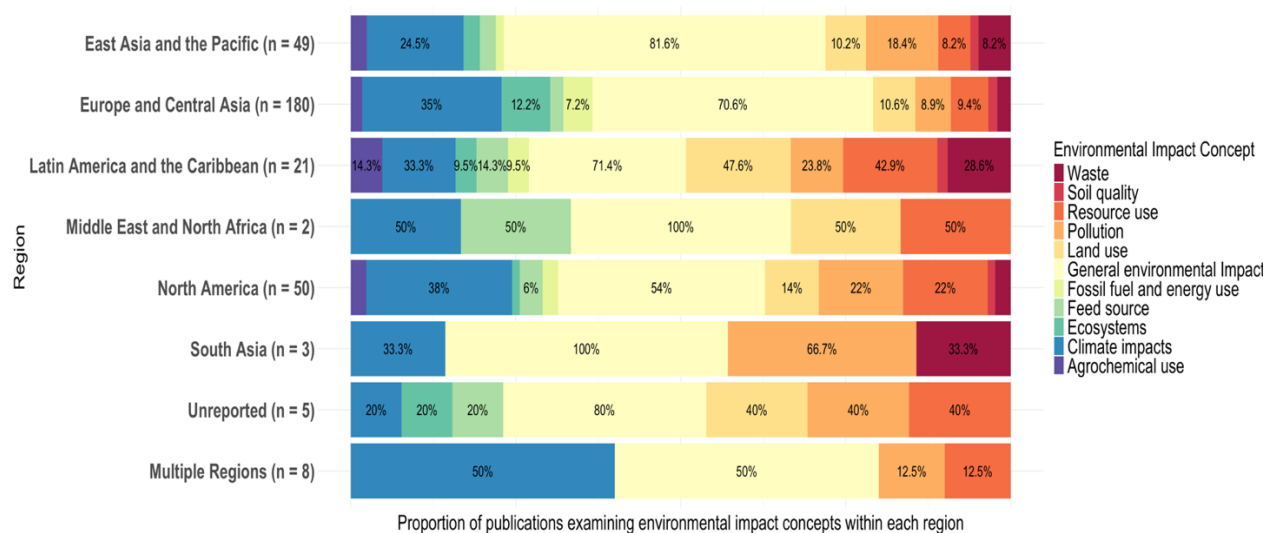


Figure 5: Proportion of publications examining environmental impact concepts by global regions

3.2.3 Regional Priorities in Animal Welfare

A discernible trend also emerged in the examination of the specific animal welfare topics discussed in peer-reviewed publications (**Figure 6**). Among the publications examining animal welfare (n=402), the most common was **‘general animal welfare’** (n=255). In the **‘general**

animal welfare' category, studies addressed consumer perceptions regarding overarching concepts like animal welfare standards, animal protection, animal-friendly practices, and humane treatment.

Beyond a general thematic focus on animal welfare, research across all global regions prominently addressed specific issues. Discussions commonly centered on the adequacy of living conditions—such as outdoor access, flooring, and stocking density (**'housing'**: n=172); the method, type, and dietary quality of animal feed (**'feed'**: n=108); and issues related to animal stress, pain, suffering, and emotional and cognitive states (**'mental and psychological well-being'**: n=106). Significant attention was also given to farm animal rights and their ethical treatment (**'animal ethics'**: n=176), as well as ethical slaughter methods (**'slaughter'**: n=76) (**Figure 6**). Each region exhibited distinct focal points aligned with its unique priorities. Latin America and the Caribbean specifically concentrated their animal welfare consumer research on **feed, mental and psychological well-being, slaughter** methods, and **animal ethics**. Conversely, East Asia and the Pacific had a relatively higher focus on housing. North America, in comparison to other regions, discussed animal ethics (n=5, 7.6%), slaughter, and mental and psychological well-being the least. Similarly, Europe and Central Asia had the least proportion of publications discussing consumer perceptions about feed compared to other regions

Following these, discussions on the physical health and well-being of animals, focusing on disease prevention, physical fitness, and overall health maintenance (**'physical health and well-being'**: n=74), and animal behavior, encompassing the freedom to express natural behaviors such as social interactions, grooming, and exploratory behaviors (**'animal behavior'**: n=66), were less noted. Other discussions also covered physical integrity practices such as castration, dehorning, and ear-tagging (**'physical integrity'**: n=60), consumer perceptions

addressing farm animal transportation issues such as adequate space per animal, journey length, the condition and ventilation of vehicles, and the provision of food and water during transport (**‘transportation’** n=56), discussions around the restrained use of antibiotics to prevent resistance (**‘antibiotic use’**: n=52) and enforcement of certifications, laws and standards for animal welfare (**‘regulatory compliance’**: n=38). Receiving the least attention were ethical breeding practices and genomic technology used for animal welfare (**‘genetics’**: n=24), which garnered the least focus across all regions. Despite their lower overall focus, certain regions still showed major interest in these less-studied topics. Research focused on animal welfare in North America predominantly addressed **antibiotic use**, representing of all animal welfare-related publications in the region, a proportion higher than that seen in other regions. Similarly, Europe and Central Asia were notable for their emphasis on **genetics**, which accounted for 7.23% (n=16) of all animal welfare-related publications there, also a higher percentage compared to other regions. In Latin America and the Caribbean, considerable attention was given to **physical health and well-being**, and **animal behavior**, and East Asia and the Pacific notably discussed **physical integrity, transportation, and regulatory compliance**.

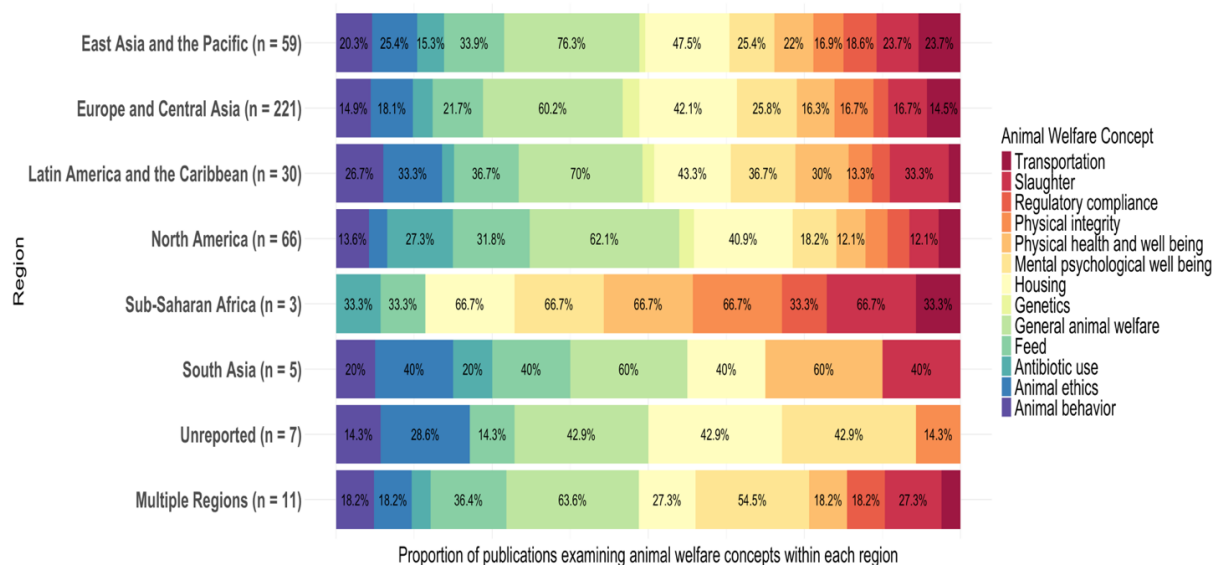


Figure 6: Proportion of publications examining animal welfare concepts by global regions

3.2.4 *Integrated Examination of Animal Welfare and Environmental Impact with Other Sustainability Concerns*

In research on consumer perceptions of meat sustainability, animal welfare and environmental impact were seldom standalone topics; they were often explored alongside other social and economic sustainability issues. These included human health and nutritional benefits and risks or meat consumption; economic factors such as the affordability of meat products; food safety concerns like antibiotic residues; cultural, technological, and religious acceptability of food, including genomic advancements that enhanced food quality; the origin of food; economic sustainability for producers; agrarian values; and labor conditions in animal production. Moreover, discussions also extended to global food security, local food priorities, the legality of growth hormones, welfare, and housing conditions in meat production, as well as genetic conservation efforts focused on preserving heritage breeds, genetic diversity, and biodiversity

(Figure 7). While human health was a predominant topic of study across all regions, it was particularly emphasized in Europe and Central Asia and East Asia and the Pacific. Additionally, European and Central Asian research extensively covered consumer perceptions concerning the **origin** of meat, **local food** and **genetic conservation** (n=5, 2.3%). Although Latin America and the Caribbean also addressed **genetic conservation**, their contributions were fewer in number (n=1), representing a smaller proportion of their total publications on other social and economic sustainability concepts. Compared to other regions, East Asia and the Pacific also showed major interest in **food acceptability** and **food safety**. Similarly, Latin America and the Caribbean focused considerably on **food safety**, and further explored **economic considerations for producers**, **agrarian values**, **global food security**, and **labor conditions**. **Economic considerations for consumers** were particularly noted in North America and **legality** around growth hormones was predominantly studied in Latin America and the Caribbean and North America (n=2, 3.4%) (Figure 7).

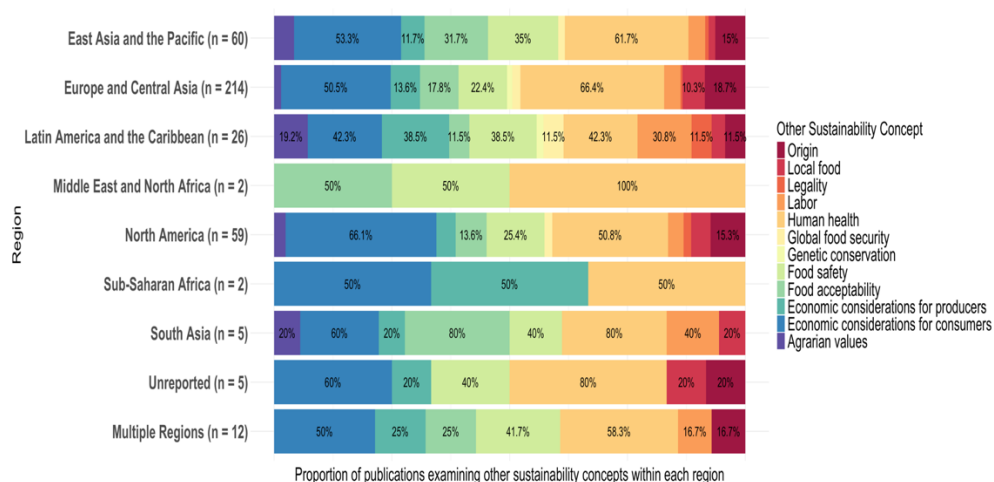


Figure 7: Proportion of publications examining other social and economic sustainability concepts by global regions

3.1 TRENDS IN TYPES OF CONSUMERS 'PERCEPTIONS'

Figure 8 shows a variety of psychological and social constructs used to study consumer perceptions related to animal welfare and environmental impact. The literature prominently featured constructs such as “behaviors or norms”, “attitudes”, “willingness to”, “influence of”, and “general perceptions”. On the other end of the spectrum, less frequently studied constructs included “complaints”, “neural responses”, and “satisfaction”.

Scholars examining consumer **behaviors or norms** often adopted a multifaceted approach to understanding factors influencing consumer behaviors. This research frequently examined the impact of factors, such as marketing strategies, social campaigns, educational videos, economic incentives, and effective communication strategies, which interact with consumers' personal attitudes and societal norms to modify and adopt sustainable dietary patterns like reducing meat intake.⁶⁹⁻⁷¹ Moreover, the use of behavioral change models and theories to understand normative and social influences and decision-making was prevalent in this field. Scholars applied frameworks like the Theory of Planned Behavior, The Stage Model (TTM), Theory of Reasoned Action and the Value-Belief-Norm Theory to examine how social and personal norms, along with attitudes, knowledge, self-efficacy, readiness for behavioral change, personal beliefs, perceived risks, perceived benefits, perceived social pressures and perceived control among many others, drive consumer evaluation of production systems and purchasing behaviors.⁷²⁻⁷⁷

In addition to theoretical frameworks, practical aspects of consumer behavior were also examined by researchers. Consumers' **willingness to** act on their beliefs and attitudes provided measures of their readiness to adopt animal-friendly and environmentally sustainable practices. This construct captured the practical aspects of translating beliefs into actions, such as paying

more for higher welfare meat products like humane treatment or free-range production systems,^{78,79} supporting climate-friendly production practices,⁸⁰ or eating and trying sustainable meat alternatives such as insects or cultured meat.^{81,82}

Despite the prevalence of constructs such as “behaviors or norms,” “attitudes,” and “willingness to,” research in this field also included contributions that attempted to address the broader construct of “**general perceptions**” and its impact on consumer behavior. These studies often relied on consumer-stated perceptions, which referred to both sensory information, such as taste, texture, and appearance, and cognitive processes, including cognitive associations or mental representations. For example, consumer perceptions were examined on carbon-neutral beef, environmental impacts of meat consumption, sustainability of in-vitro proteins, and the pivot to meatless meals, showcasing a dynamic integration of sustainability considerations into dietary habits influenced by health and environmental motivations.^{20,83–85}

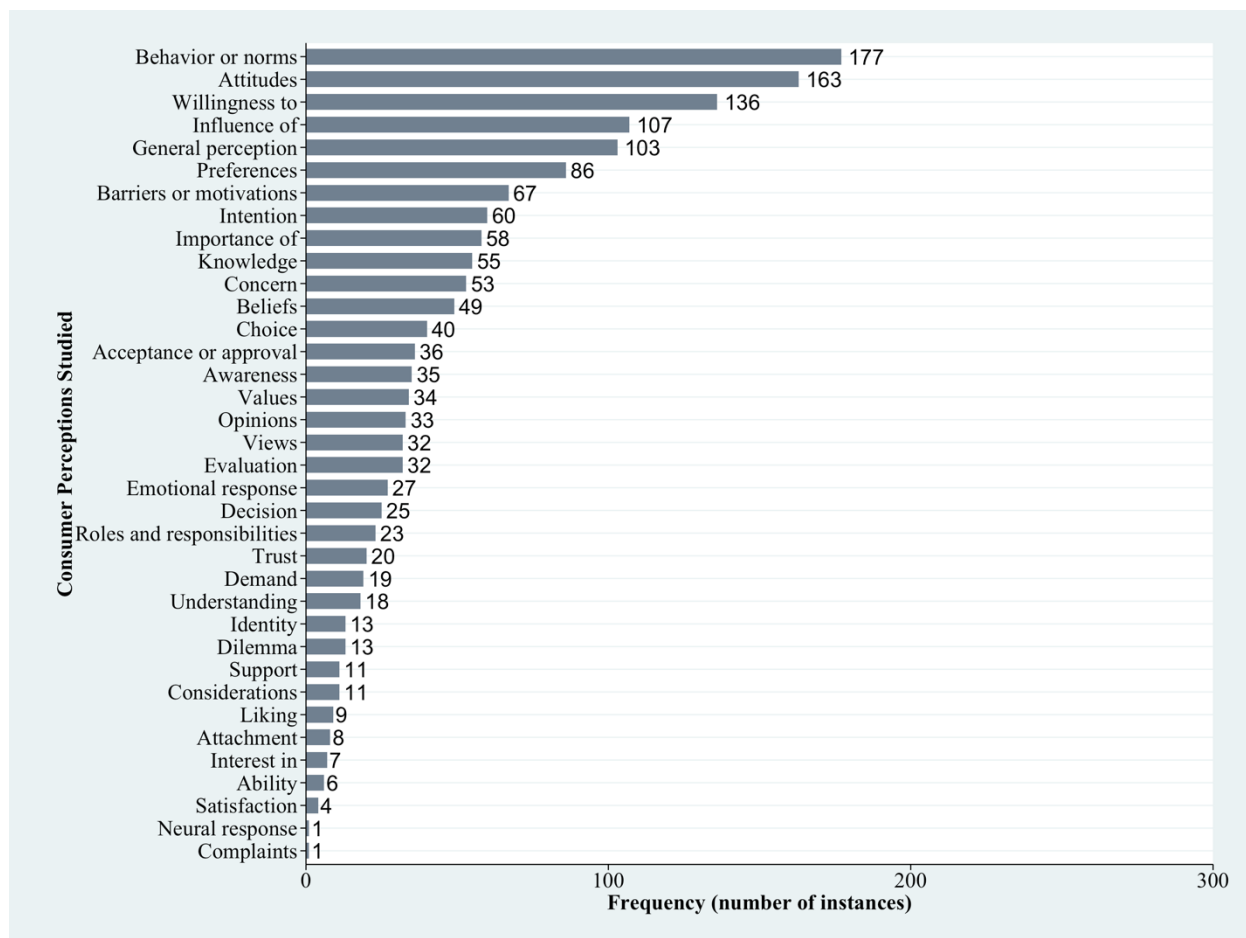


Figure 8: Frequency of types of consumer perceptions studied.

3.2 TRENDS IN STUDY DESIGNS

As shown in **Figure 9**, the research on consumer perceptions of meat's environmental and animal welfare sustainability employed a variety of methodological approaches. The top five commonly used methods were general survey research, choice experiments, qualitative research, observational behavioral change studies, and mixed methods research. Conversely, the least commonly used methods include qualitative behavioral change studies, publications leveraging real-world purchasing behaviors to infer consumer preferences/revealed preference, content analysis of relevant texts, and quasi-experimental studies.

Studies utilizing **general survey research** involved the collection of consumer information via questionnaires and subsequent quantitative analysis, allowing researchers to efficiently identify trends and patterns across a wide range of consumers. For example, many studies employed nationally representative consumer surveys to gauge the importance consumers placed on factors like animal welfare, environmental impact, and health considerations when making meat purchasing decisions.^{86–88} These surveys often included Likert-scale questions that captured the degree to which consumers prioritize sustainability-related attributes compared to other product attributes like price, taste, and convenience.^{89,90} Additionally, some survey designs incorporated demographic variables into their analyses, enabling researchers to analyze differences in sustainable meat attitudes and behaviors across factors like age, income, and geographic location.^{91,92}

While surveys offered breadth and efficiency in capturing broad trends, **choice experiments** were used in publications to delve into consumer preferences and willingness to pay for meat products or alternative meat products raised with animal-friendly practices, while also protecting air, water, and soil from pollution.^{82,93,94} These experiments — a part of a larger family of **preference elicitation** methods used in economics research — elicit and infer consumers' stated preferences in hypothetical scenarios, in contrast to revealed preference methods that observe actual purchasing behavior.⁹⁵ Drawing from frameworks used in other disciplines, the studies employed methods such as direct questioning of consumers' willingness to pay, bidding-based elicitation, and discrete choice experiments.^{93,96–98} In the latter, participants would often be presented with simulated market scenarios where researchers estimated the relative importance consumers placed on credence attributes such as organic, local, price, animal welfare, environmentally friendly, health, and sustainability attributes in meat products.^{95,97}

Another key methodological approach employed by researchers in the included publications was the use of behavioral change methods, qualitative methods, and mixed methods approaches to further explore consumer attitudes, behavioral intentions, motivations, and behaviors. Observational behavioral change methods commonly used behavioral change theories in survey items or interview questions to examine and monitor intended or actual consumer behaviors such as consuming or reducing the consumption of meat, approval of red meat farming practices, seeking information about animal welfare, or becoming a member of animal rights group.^{99,100} In contrast, qualitative methods and mixed methods approaches tended to assess the underlying consumer motivations, values, and attitudes regarding meat consumption. These qualitative and mixed methods often employed individual interviews and group-based focus groups to gather detailed data on the ways consumers individually or in groups framed, understood, and perceived meat and meat consumption practices in relation to animal welfare and environmental considerations.^{101,102}

The least commonly used methods in the literature focused on inferring consumer behavior and opinions based on contextual factors, examining how consumer perceptions are shaped by media and marketing contexts (**Figure 9**). Content analysis methods, for instance, systematically examined and interpreted textual data such as online newspaper comments reviews to uncover patterns and themes related to consumer perceptions of in-vitro meat as more sustainable than conventional meat because it reduces animal deaths and environmental impacts conventional meat as bad for the environment, or in-vitro meat as less sustainable than conventional meat.^{103,104}

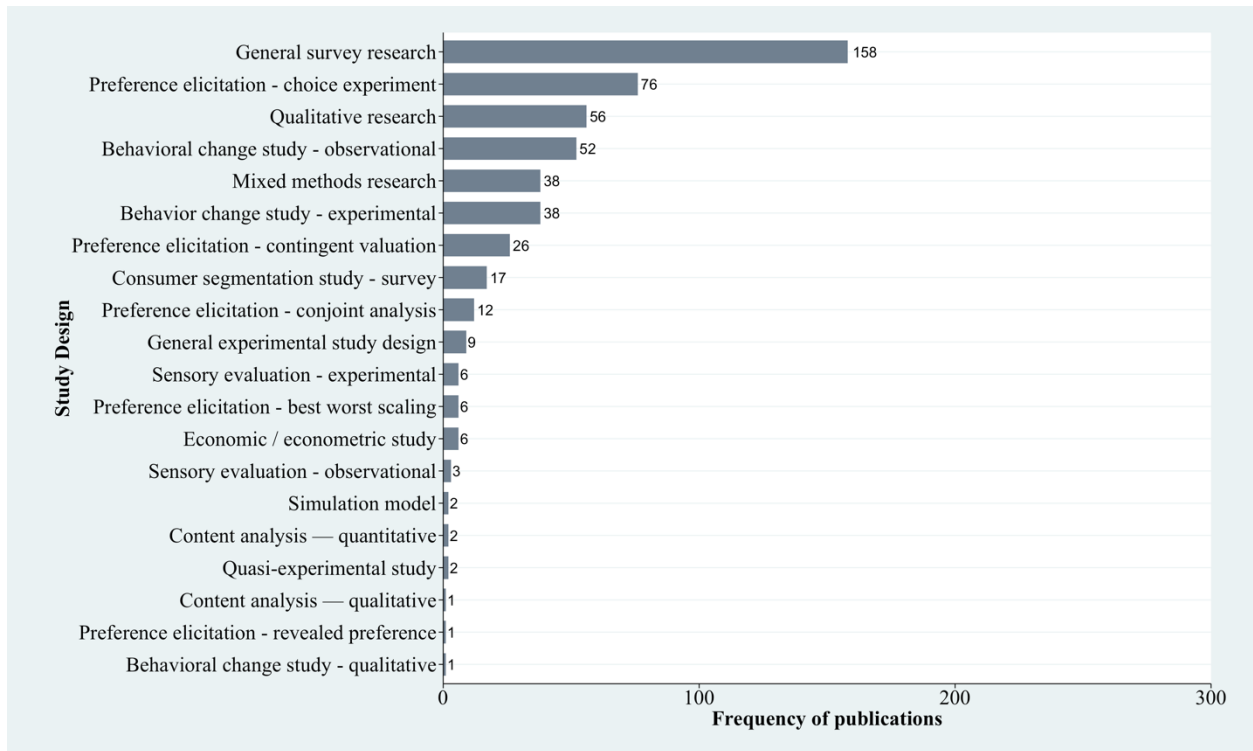


Figure 9: Frequency of publications by study design

Chapter 4. DISCUSSION

4.1 OVERVIEW

This scoping review aimed to comprehensively synthesize over a decade of recent research assessing consumers' perceptions of beef, pork, and chicken welfare and environmental impacts. From the initial 12,964 peer-reviewed publications from searches in five databases, 512 were included in the final set for analysis. The findings from this scoping review detail a marked increase in research on consumer perceptions of meat sustainability over this time period, with more studies focusing on animal welfare than environmental impact across all regions, though Europe and Central Asia were particularly noted for their extensive coverage of both topics throughout the period and the least coverage in Sub-Saharan Africa, Middle East and North Africa, and South Asia. Environmental impact studies commonly addressed broad concerns like environmental degradation and environmental sustainability, often emphasizing standalone assessments rather than integrating multiple environmental issues. There were regional variations: North America focused more heavily on climate impact studies, whereas Latin America and the Caribbean were prominent in studies on resource use and land use, and East Asia and the Pacific on general environmental impact. Studies focusing on animal welfare showed that East Asia and the Pacific focus predominantly on housing conditions, Latin America and the Caribbean on ethical slaughter and feed quality, North America and Europe and Central Asia on general animal welfare while noting regional interests in less-studied topics like antibiotic use, and genetics respectively. Furthermore, studies frequently incorporated discussions of broader social and economic sustainability issues, including human health, food

safety, and economic considerations for consumers and producers. The following discussion section describes three key takeaways: (1) Many studies focused on environmental impacts or animal welfare in a general sense, (2) Geographic variation in specific sustainability topics may reflect regional trends in broader sustainability discourse, and (3) Consumer perceptions occupy a continuum including thinking, feeling, and behavior.

4.2 ENHANCING CLARITY IN CONSUMER PERCEPTIONS OF MEAT INDUSTRY IMPACTS

The majority of included studies took a broad approach when discussing these issues. Unlike animal welfare studies, which often integrated general concepts with other constructs, publications on the environmental impacts of the meat industry predominantly focused on standalone general environmental impact assessments, with less emphasis on specific environmental topics. A discernible pattern emerged in these studies, where there is often an oversight regarding the need for specificity—especially in specifying these terms to consumers or clarifying what consumers understand when they encounter these terms in surveys, a method that was dominantly used to gather information about consumer reactions.¹⁰⁵ These sustainability 'blind spots'—areas of misunderstanding or overlooked details—assume that consumers have a uniform definition of environmental and animal welfare sustainability or understand its various components in the same way—which isn't always true.¹⁰⁶ Additionally, if discussions or actions only focus on certain aspects of the two sustainability components and neglect others, they fail to address the full spectrum of sustainability issues that concern consumers.¹⁰⁷

These findings are corroborated by previous research showing that while progress has been made in consumer farm animal welfare awareness, there still exists a common misalignment where consumers often interpret animal welfare as indicative of other attributes, such as product safety and health benefits.^{108(p200)} Similarly, studies on environmental impacts often reveal that public perceptions, such as those concerning climate change, are frequently shaped by flawed mental models, including misconceptions about the greenhouse effect and low carbon literacy.^{109,110} These misconceptions can coexist with accurate beliefs, creating a complex and sometimes contradictory understanding of environmental issues.

4.3 EXPLAINING REGIONAL PERSPECTIVES AND PRIORITIES IN CONSUMER RESEARCH ON MEAT SUSTAINABILITY

The examination of consumer preferences within sustainability research contributed uniquely to a comprehensive scholarly understanding, acknowledging that no single research effort can fully address all environmental, economic, and social issues. This is particularly relevant as findings from this scoping review highlighted distinct regional priorities on what is brought to the consumer when researching what they care about meat sustainability.

One possible explanation for the regional focus on consumer research into land use, resource reuse, and slaughter practices in Latin America and the Caribbean, as opposed to North America's emphasis on climate impacts and general animal welfare, is the rapid expansion of meat production in the region. Brazil, a Latin American significant player, contributed 20% to global beef exports in 2018 and is a major producer of livestock feed such as soybean.^{111,112} More recently, Brazil's beef industry's expansion, challenges such as high production costs, potential droughts, and deforestation persist, leading to US consumer boycotts of fast food that sources its meat from this region.^{113,114} Moreover, this expansive production has significant

environmental repercussions with approximately 788,353 km² or 20% of Brazilian Amazon being deforested by 2018 attributed by global demand for beef.¹¹⁵ Consequently, the efficient use of land restoration, sustainable resource management, and production efficiency are critical issues brought up in consumer research as top priorities for both economic viability and environmental health.

However, findings from this scoping review highlight a contradiction: recent consumer research in North America has shown a strong focus on the affordability and pricing of meat products, alongside major discussions on climate impacts, antibiotic use, and the housing conditions of animals within the meat industry. This contrasts with data from 1960 to 2000, showing a significant decline in the percentage of disposable income Americans spend on food—a trend that has stabilized since then.^{116,117} Despite the decrease in the proportion of disposable income Americans spend on food, expectations for sustainably and ethically produced meat persist alongside demands for affordable prices, reflecting consumer priorities for both ethical production practices and economic accessibility.¹¹ Thus, the dialogue around meat production and consumption centers on balancing cost with conscientious production practices, reflecting a dual demand for ethical responsibility and economic accessibility in food choices.

Additionally, in this scoping review, major economies like China have shown a recent emphasis on general environmental impacts, food safety, and food acceptability. This focus may reflect the relatively recent engagement of the East Asia and Pacific region with environmental issues surrounding meat production post-2017, a shift also driven by the rapid increase in per capita income in Asia, the westernization of Asian diets leading to increased consumption of animal products, and the consequent expansion of meat supply, consumption, and production.¹¹⁸ Given this rapid pace of change, the environmental discourse in this region is evolving, with a

broad focus on understanding and mitigating the various environmental impacts associated with the increased demand for meat, thereby driving research efforts to address consumer concerns. This shift also necessitates complex trade-offs, particularly in maintaining food safety standards, preserving cultural culinary practices, upholding social identities associated with meat consumption, and ensuring food sufficiency.¹¹⁹ Often, the urgency of these concerns can overshadow the consideration of animal welfare aspects, which are typically studied alongside primary priorities like food safety and human health skewed towards a dietetic rather than productionistic approach, prioritizing consumer health and safety in meat consumption, which suggests a significant concern for how dietary choices influenced by meat quality impact consumer health and cultural practices in the region.^{11,120}

4.4 UNDERSTANDING THE CONTINUUM OF CONSUMER PERCEPTIONS IN SUSTAINABILITY RESEARCH

Findings from this scoping review also highlight that there are varied methodological approaches used to study consumer perceptions about environmental impact and animal welfare. In some of the included studies, researchers conceptualize consumer psychological and social constructs not merely as singular actions but as parts of an integrated, continuum of constructs.¹²¹ The constructs measured by researchers span the entire consumer behavior continuum, beginning with upstream heuristic antecedents—awareness, knowledge, beliefs, attitudes, values, and understanding. These fed into intermediary factors such as emotional responses, motivations, concerns, considerations, identity, and placing importance on attributes, which significantly influences affective responses. Downstream outputs then include behavior or norms, choices, decisions, evaluation, satisfaction, preferences, and willingness to act. Constructs like acceptance, approval, attachment, complaints, demand, political and social influences, interest in,

opinions, roles, responsibilities, and views are versatile and may appear across multiple stages, influenced by the specific contextual factors of each study. This framework of interconnected constructs is vividly illustrated through the application of behavioral change theories, particularly Azjen's Theory of Planned Behavior (TPB) in experimental research settings. TPB has proven instrumental in mapping out how constructs such as attitudes, subjective norms, perceived behavioral control, and other practical considerations such as cost, convenience, and availability—rooted in the upstream antecedents—are crucial in shaping consumers' intentions and behaviors towards sustainable practices.¹²² In cultures where sustainability is a collective value, individuals are more likely to adopt sustainable practices, driven by a shared sense of responsibility.⁸³ Moreover, consumer's motivation to purchase environmentally friendly products may be hindered if these products are either unaffordable or not readily available, highlighting the importance of considering broader contextual influences that shape behavior.¹²³

While each study within this review significantly contributes to our understanding by focusing on specific constructs such as cognitive awareness, affective responses, or behaviors, it is also critical to recognize how these pieces collectively inform the broader consumer behavior continuum. This does not suggest a shift in research focus but acknowledges that even when studies are concentrated on specific consumer constructs, they are inherently part of a larger collaborative effort that enhances interdisciplinary understanding. It becomes evident that fostering connections between different research domains can further enrich our collective insights, thereby strengthening the comprehensive framework through which we interpret consumer behavior

For instance, the literature on preference elicitation through choice experiments has made significant contributions to our understanding of economic valuation in the context of

sustainability, particularly about animal welfare, environmental impact, and other social and economic aspects.¹²⁴ By employing choice experiments, researchers have been able to quantify the monetary value that consumers place on products that guarantee humane treatment and living conditions for animals and products with reduced carbon footprints and environmentally friendly packaging.¹²⁴ However, relying solely on choice experiments to understand consumer behavior would have its limitations. As highlighted in the study by Thorslund, 2017, market-driven strategies that aim to promote animal welfare and sustainability through consumer willingness to pay a premium require a more comprehensive approach.¹²⁵ Consumers must prioritize animal welfare, assume responsibility, *and* be willing to pay more, while farmers, slaughterhouses, meat processors, and retailers must also play their roles.¹²⁵ This multifaceted approach can be contrasted with choice experiments, which are one of several methods that focus primarily on individual decision-making within hypothetical scenarios. While choice experiments provide valuable insights by focusing on individual decision-making within hypothetical scenarios, they exemplify one of several methods used in research. As with any single method, choice experiments have limitations in capturing the full spectrum of social and cultural contexts that influence consumer behavior in real-world purchasing settings. This illustrates the necessity of researchers to reflect the diverse contributions of each research method and discipline, as no single approach can fully capture the complexity of consumer dynamics, yet each enriches our collective understanding of consumer behavior.¹²⁴

4.5 STRENGTHS AND LIMITATIONS

One notable strength, to the best of my knowledge, is that this is the first scoping review to map the current state of knowledge regarding consumers' perceptions of animal welfare and

the environmental impacts of beef, pork, and chicken. Additionally, its extensive breadth and scope were facilitated through an ongoing collaboration with a university librarian. The librarian's expertise in database management, developing search strategies, and intricate knowledge of indexing systems were instrumental in ensuring that our search processes were not only comprehensive but also specifically adapted to the unique requirements of each database, thereby minimizing the risk of overlooking relevant studies. Such precision is not typically achievable in reviews without specialized input, underscoring the value of this interdisciplinary approach. Other than the librarian's specialized skills in constructing precise search strings, the inclusion of specialized agricultural and environmental databases led to the identification of various studies on meat consumption and sustainability. Future scoping reviews should consider integrating such expertise early in the planning stages to enhance the reliability and depth of their findings.

The implementation of a dual screening process is another strength of this scoping review. Each title and abstract were reviewed by two independent, blinded reviewers. Following the screening, the entire research team discussed and reconciled the differences in the reviewers' decisions, leading to a more thorough evaluation of each study and ensuring that no single reviewer could unduly influence the selection process. This systematic method of resolving discrepancies enhanced the reliability of the study selection by ensuring that all relevant research was considered and that decisions were not based on any one reviewer's subjective judgment.

However, despite these strengths, certain limitations are inherent in this scoping review. The exclusion of studies not indexed in selected databases or published in languages other than English presents a significant limitation. This exclusion may have resulted in the omission of relevant research, potentially skewing our findings towards studies available in English-language

databases. A significant limitation we also encountered was the inability to perform dual extraction due to the large volume of publications that needed to be reviewed. This meant that each article was extracted by only one reviewer, without a secondary reviewer to confirm the decision of the other. This may have reduced the opportunity to cross-verify findings and catch potential errors or differing interpretations.

Finally, the disciplinary composition of the project team, comprising experts in environmental science and public health, was both a strength and a limitation. Our team's diverse backgrounds, including expertise in public health, nutrition, food systems, and environmental sciences, allowed us to incorporate multiple perspectives, enriching our analysis with insights from various fields. This diversity was particularly beneficial during the initial categorization in the content analysis. For instance, when examining the extracted open-ended variables, our varied disciplinary knowledge facilitated thorough discussions that facilitated the inductive establishment of higher-order categories to accurately reflect concepts such as environmental impact, animal welfare, psychological and social constructs, and study designs as defined by different disciplines. Given the multidisciplinary nature of this research area, it's important to note that our team composition included only a subset of relevant disciplines. While fields such as behavioral economics, animal science, sociology, psychology, and much more significantly contribute to this literature, they were not represented in this study's team. Consequently, our analysis may have overlooked methods or approaches prevalent in other fields. While current scoping review frameworks recommend iterative refinement of research questions and inclusion and exclusion criteria, one recommendation for scoping review methodology is to emphasize the iterative revision of the study team composition to incorporate a broader range of disciplinary expertise, ultimately leading to a widened understanding of the research landscape.^{59,60,126}

Additionally, future research should aim to characterize which disciplines are contributing to this field, providing a clearer picture of how different fields approach the topic and allowing for a more refined characterization of methods.

Chapter 5. CONCLUSION

The findings of this research underscore the importance of mapping where, how, and what researchers are examining in the context of consumers' perceptions of meat sustainability. This scoping review explored existing research on consumer perceptions regarding the sustainability of meat consumption, particularly focusing on animal welfare and environmental impacts. An analysis of 512 peer-reviewed publications revealed a growing research focus on consumer perceptions of both environmental and animal welfare aspects of meat products, with the thematic focus varying regionally for specific sustainability concepts.

This study's findings contribute to a broader understanding of the multidisciplinary methodological diversity across studies and the diversity of consumer psychological and social constructs, which researchers have used to capture the nuanced behaviors and attitudes of consumers more accurately, albeit within their disciplinary boundaries. However, the current research has limitations that suggest several avenues for further exploration. Given the evolving landscape of consumer perceptions and the increasing emphasis on sustainability, future reviews may be conducted to provide a comprehensive overview of the disciplines contributing to this field. These reviews could delineate the focus on dietetic or agricultural approaches to understanding consumer behavior, track the evolution of methods used to examine these perceptions over time, and explore cross-disciplinary research efforts. Such efforts might assess

the consumer research efforts to examine animal welfare and environmental impacts of traditional meat products compared to alternatives like in-vitro meat and plant-based food products. This exploration would enable researchers to identify potential interdisciplinary collaborations within the existing literature.

Methodologically, addressing consumers' misconceptions about meat's environmental impact and animal welfare requires careful framing of information during collection of consumer data. This necessitates first understanding consumers' cognitive biases and heuristics that lead them to associate animal welfare, and environmental impact with other product attributes. To bridge this gap, future research should consider employing methods in Human-Computer Interaction (HCI) methods, such as usability testing and cognitive walk-throughs of decision-making processes. Usability testing in this context would involve evaluating how users interact with surveys or data collection methods, ensuring that these tools are user-friendly and effectively capture accurate consumer perceptions.¹²⁷ Cognitive walk-throughs can help researchers understand the thought processes consumers go through when responding to sustainability-related information, enhancing the design of surveys and other data collection instruments. Adopting an interdisciplinary perspective that considers the interplay of these constructs can enable scholars to clarify and expand the scope of what is being examined, fostering a more cohesive understanding of sustainability issues and promoting innovative solutions. Moreover, researchers can facilitate knowledge provision, credibility, and evidence-based action, ultimately bridging the gap between academic disciplines and stakeholders

Finally, on a practical level, the implications of this research are multifold. The insights gleaned from this study can inform targeted intervention strategies and policy initiatives to address the environmental and farm animal welfare challenges posed by the meat industry in a

more nuanced, regionally relevant manner. I recommend that stakeholders adopt an interdisciplinary view of the research landscape and exercise caution in making generalizable conclusions about consumer concerns regarding the sustainability of pork, beef, and chicken based on any single study. This caution is crucial as research results are used to inform policies, interventions, and marketing strategies while engaging with consumers. The data from this review reflect a wide range of regional, cultural, and contextual factors that influence consumer perceptions and behaviors. Making broad generalizations without considering these nuances could lead to ineffective sustainability actions. Therefore, tailored approaches and global research efforts that account for local priorities and consumer values are essential for the successful implementation of sustainability initiatives. Additionally, while making generalizable conclusions about the state of research in the Middle East, North Africa, South Asia, and Sub-Saharan Africa was challenging due to the scarcity of publications, the research does warrant further exploration. These economies require special consideration, especially in global concerted efforts where decisions about sustainability practices are made. This ensures that all regions are appropriately represented and that global strategies are inclusive and effectively address local and global challenges.

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APPENDIX A: DETAILED SEARCH STRATEGIES

These searches were conducted on 12/05/2022. In each of the five databases, we ran two separate searches related to consumer perceptions of sustainable meat production: one with terms related to environmental impact, and one with terms related to animal welfare. Each search used index terms specific to each database, including MeSH terms for PubMed and the appropriate thesaurus for PsychINFO, Business Source Complete and Proquest's Agricultural and Environmental Sciences Collection.

Search strategy for Database 1: Proquest's Agricultural and Environmental Sciences Collection

Fields searched: abstract OR title OR su.exact

Type of records included: Scholarly journals, trade journals, reports

Search terms related to animal welfare:

su.exact(("Consumer behavior" OR "consumer attitudes" OR "consumer demand" OR "consumer information" OR "consumer preferences" OR "Conjoint analysis" OR "Public opinion" OR ((Consumers OR "Consumer groups") AND ("willingness to pay" OR "attitudes and opinion" OR Values OR Investigations OR Norms OR Consumption OR Preferences OR Knowledge OR "Choice Behavior" OR Purchasing OR "Decision making" OR "Comparative analysis" OR Polls OR Surveys OR questionnaires))) AND (livestock OR beef OR Ham OR Meat OR "Animal production" OR "Poultry production" OR "Meat Production" OR Husbandry OR "Cattle industry" OR "meat products" OR "farmed animal species" OR pork OR "meat consumption") AND ("animal welfare" OR "Animal protection" OR Feeds OR "cattle feeding" OR Ethics OR Emotions OR "Animal rights movement")) OR abstract(((Consumer* OR Citizen* OR Public OR Customer*) NEAR/3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR Values OR View OR viewpoint OR Opinion OR Beliefs OR Demand OR Willingness-to-pay OR Norms)) AND (Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") AND (Animal NEAR/2 (wel* OR care OR ethics OR emotionality OR cruelty OR rights) OR "Livestock care" OR Feed* OR "Livestock Feed*")) OR title(((Consumer* OR Citizen* OR Public OR Customer*) NEAR/3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR Values OR View OR viewpoint OR Opinion OR Beliefs OR Demand OR Willingness-to-pay OR Norms)) AND (Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") AND (Animal NEAR/2 (wel* OR care OR ethics OR emotionality OR cruelty OR rights) OR "Livestock care" OR Feed* OR "Livestock Feed*" OR humane))

Search terms related to Environmental Impact:

su.exact(("Consumer behavior" OR "consumer attitudes" OR "consumer demand" OR "consumer information" OR "consumer preferences" OR "Conjoint analysis" OR "Public opinion" OR

((Consumers OR "Consumer groups") AND ("willingness to pay" OR "attitudes and opinion" OR Values OR Investigations OR Norms OR Consumption OR Preferences OR Knowledge OR "Choice Behavior" OR Purchasing OR "Decision making" OR "Comparative analysis" OR Polls OR Surveys OR questionnaires))) AND (livestock OR beef OR Ham OR Meat OR "Animal production" OR "Poultry production" OR "Meat Production" OR Husbandry OR "Cattle industry" OR "meat products" OR "farmed animal species" OR pork OR "meat consumption") AND (Climate OR "environmental impact" OR "Climate Change" OR Emissions OR ("greenhouse gas" OR "greenhouse gases") OR "Environmental stewardship" OR "Water quality" OR "Conservation of Natural Resources" OR Biodiversity)) OR abstract(((Consumer* OR Citizen* OR Public OR Customer*) NEAR/3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR Values OR View OR viewpoint OR Opinion OR Beliefs OR Demand OR Willingness-to-pay OR Norms)) AND (Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") AND (Sustainab* OR (Environment* AND (impact OR footprint OR effect OR stewardship)) OR "Climate change" OR ("greenhouse gas" OR "greenhouse gases") OR GHG OR "Greenhouse Effect" OR "Water quality" OR Pollution OR "Pollution Control" OR "Air quality" OR Biodiversity OR "Land use" OR "Antibiotic resistance" OR "Environment* friendly" (Carbon NEAR/2 (offsets OR footprint)))) OR title(((Consumer* OR Citizen* OR Public OR Customer*) NEAR/3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR Values OR View OR viewpoint OR Opinion OR Beliefs OR Demand OR Willingness-to-pay OR Norms)) AND (Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") AND (Sustainab* OR (Environment* AND (impact OR footprint OR effect OR stewardship)) OR "Climate change" OR ("greenhouse gas" OR "greenhouse gases") OR GHG OR "Greenhouse Effect" OR "Water quality" OR Pollution OR "Pollution Control" OR "Air quality" OR Biodiversity OR "Land use" OR "Antibiotic resistance" OR "Environment* friendly" OR (Carbon NEAR/2 (offsets OR footprint))))

Search strategy for Database 2: PubMed

Fields searched: Search string searched under Title and abstract (Tiab)

Type of records included: The type of records included in the export was not specified

Search terms related to Animal Welfare:

((("Consumer Behavior"[Mesh] OR "Public Opinion"[Mesh] OR (("consumer*"[tiab] OR "public"[tiab] OR "citizen*"[tiab] OR customer*) AND (attitude*[tiab] OR behavior*[tiab] OR knowledge[tiab] OR preference*[tiab] OR perception*[tiab] OR priorit*[tiab] OR values[tiab] OR views[tiab] OR viewpoint[tiab] OR opinion*[tiab] OR beliefs[tiab] OR demand*[tiab] OR willingness[tiab] OR norm*[tiab] OR investigations[tiab] OR consumption[tiab] OR knowledge[tiab] OR Purchasing [tiab] OR "decision making"[tiab] OR "comparative analysis"[tiab] OR polls[tiab] OR survey*[tiab] OR questionnaire*[tiab]))) AND ("livestock"[MeSH] OR "livestock"[tiab] OR "meat"[MeSH] OR "meat"[tiab] OR "Farm animal*"[tiab] OR "red meat"[MeSH] OR "red meat"[All Fields] OR "beef"[tiab] OR "cattle"[MeSH] OR "cattle*"[tiab] OR "Cow"[tiab] OR "bovin*"[tiab] OR "pork meat"[MeSH] OR "pork"[tiab] OR "swine"[MeSH] OR "swine"[tiab] OR "poultry"[MeSH] OR "poultry"[tiab] OR "broiler*"[tiab] OR "rear*"[tiab] OR "Animal husbandry"[MeSH] OR "Animal husbandry"[tiab] OR "meat industry"[tiab]) AND ("Animal Welfare"[Mesh] OR "Animal ethic*"[tiab] OR "Animal emotional*"[tiab] OR "animal cruel*"[tiab] OR "animal right*"[tiab] OR "animal wel*"[tiab] OR "Feed*" [tiab] OR "Livestock Feed*" [tiab] OR humane[tiab] OR "morals" [MeSH] OR "Social Values"[Mesh] OR "Social Norms"[Mesh] OR "Ethics"[Mesh] OR "Emotions"[Mesh]))

Search terms related to Environmental Impact:

((("Consumer Behavior"[Mesh] OR "Public Opinion"[Mesh] OR (("consumer*"[tiab] OR "public"[tiab] OR "citizen*"[tiab] OR customer*) AND (attitude*[tiab] OR behavior*[tiab] OR knowledge [tiab] OR preference*[tiab] OR perception*[tiab] OR priorit*[tiab] OR values[tiab] OR views[tiab] OR viewpoint[tiab] OR opinion*[tiab] OR beliefs[tiab] OR demand*[tiab] OR willingness[tiab] OR norm*[tiab] OR investigations[tiab] OR consumption[tiab] OR knowledge[tiab] OR Purchasing [tiab] OR "decision making"[tiab] OR "comparative analysis"[tiab] OR polls[tiab] OR survey*[tiab] OR questionnaire*[tiab]))) AND ("livestock"[MeSH] OR "livestock"[tiab] OR "meat"[MeSH] OR "meat"[tiab] OR "Farm animal*"[tiab] OR "red meat"[MeSH] OR "red meat"[All Fields] OR "beef"[tiab] OR "cattle"[MeSH] OR "cattle*"[tiab] OR "Cow"[tiab] OR "bovin*"[tiab] OR "pork meat"[MeSH] OR "pork"[tiab] OR "swine"[MeSH] OR "swine"[tiab] OR "poultry"[MeSH] OR "poultry"[tiab] OR "broiler*"[tiab] OR "rear*"[tiab] OR "Animal husbandry"[MeSH] OR "Animal husbandry"[tiab] OR "meat industry"[tiab]) AND (((("sustainab*" [tiab] OR "environment*" [tiab]) AND ("impact" [tiab] OR "footprint*" [tiab] OR "effect*" [tiab] OR "stewardship" [tiab])) OR "Climate change"[tiab] OR "greenhouse gas*" [tiab] OR "GHG"[tiab] OR "Greenhouse Effect"[tiab] OR "Water quality"[tiab] OR "environmental pollutants" [MeSH] OR ("environmental" [tiab] AND "pollutants" [tiab]) OR "environmental pollut*"[tiab] OR "Pollution Control"[tiab] OR "Air quality"[tiab] OR "biodivers*" [tiab] OR "biodiversity"[MeSH] OR "Land

use" [tiab] OR "Antibiotic resistance" [tiab] OR ("environment*" AND ("friendliness" [tiab] OR "friendly"[tiab])) OR (("carbon"[MeSH] OR "carbon" [tiab]) AND ("offset*" [tiab] OR "footprint*" [tiab]))))

Search strategy for Database 3: Web of Science

Fields searched: Search string was run under the TOPIC field (Searches title, abstract, author keywords, and Keywords Plus Example:robot* ,control* , "input shaping")

Type of records included: The type of records included in the export was not specified

Search terms related to Animal Welfare:

((((Consumer* OR Citizen* OR Public OR Customer*) NEAR/3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision*)) AND (Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") AND (Animal NEAR/2 (wel* OR care OR ethics OR emotionality OR emotion* OR cruelty OR rights) OR "Livestock care" OR Feed* OR humane OR "Livestock Feed*" OR moral*))

Search terms related to Environmental Impact:

((((Consumer* OR Citizen* OR Public OR Customer*) NEAR/3(Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision*)) AND (Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") AND (Sustainab* OR (Environment* AND (impact OR footprint OR effect OR stewardship)) OR "Climate change" OR "Greenhouse gas*" OR GHG OR "Greenhouse Effect" OR "Water quality" OR Pollution OR "Pollution Control" OR "Air quality" OR Biodiversity OR "Land use" OR "Antibiotic resistance" OR "Environment* friendly" OR (Carbon NEAR/2 (offsets OR footprint))))

Search strategy for Database 4: PsychINFO

Fields searched: Title OR Abstract OR Keyword

Type of records included: academic journals

Search terms related to Animal Welfare:

(DE("Consumer Attitudes" OR "Brand Preferences" OR "Consumer Satisfaction" OR "Consumer Behavior" OR "Shopping" OR "Consumer Ethics" OR "Consumer Research" OR "Consumer Satisfaction" OR Attitudes OR "Behavior Change" OR "Choice Behavior" OR "Consumer Psychology" OR "Consumer Surveys" OR "Eating Attitudes" OR "Eating Behavior" OR Feedback OR "Food Preferences" OR "Public Opinion") OR

TI((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision*)) OR

AB((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision*)) OR

KW(((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision*))))

AND

(DE("Chickens" OR "Cattle" OR "Meat Consumption" OR "Animal Rearing") OR

TI(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") OR

AB(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") OR

KW(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry"))

AND

(DE("Animal Welfare" OR "Animal Cruelty" OR "Animal Rights" OR "Animal Welfare Assessment" OR "Animal Cognition" OR "Consumer Ethics" OR Ethics OR Morality) OR

TI((Animal N2 (wel* OR care OR ethics OR emotionality OR emotion* OR cruelty OR rights) OR "Livestock care" OR Feed* OR humane OR "Livestock Feed*" OR moral*)) OR
 AB((Animal N2 (wel* OR care OR ethics OR emotionality OR emotion* OR cruelty OR rights) OR "Livestock care" OR Feed* OR humane OR "Livestock Feed*" OR moral*)) OR
 KW((Animal N2 (wel* OR care OR ethics OR emotionality OR emotion* OR cruelty OR rights) OR "Livestock care" OR Feed* OR humane OR "Livestock Feed*" OR moral*)))

Search terms related to Environmental Impact:

(DE("Consumer Attitudes" OR "Brand Preferences" OR "Consumer Satisfaction" OR "Consumer Behavior" OR "Shopping" OR "Consumer Ethics" OR "Consumer Research" OR "Consumer Satisfaction" OR Attitudes OR "Behavior Change" OR "Choice Behavior" OR "Consumer Psychology" OR "Consumer Surveys" OR "Eating Attitudes" OR "Eating Behavior" OR Feedback OR "Food Preferences" OR "Public Opinion") OR

TI((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision*)) OR

AB((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision*)) OR

KW((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision*)))

AND

(DE("Chickens" OR "Cattle" OR "Meat Consumption" OR "Animal Rearing") OR

TI(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") OR

AB(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry") OR

KW(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry"))

AND

(DE ("Environmental Attitudes" OR "Environmental Sustainability" OR "Climate Change" OR "Global Warming" OR "Climate Change Attitudes" OR "Pollution" OR "Antibiotic Resistance") OR

TI(Sustainab* OR (Environment* AND (impact OR footprint OR effect OR stewardship)) OR "Climate change" OR "Greenhouse gas*" OR GHG OR "Greenhouse Effect" OR "Water quality" OR Pollution OR "Pollution Control" "Air quality" OR Biodiversity OR "Biodiversity Conservation" OR "Land use" OR "Antibiotic resistance" OR "Climate information" OR "Environment* friendly" OR "Environmental degradation" OR (Carbon N2 (offsets OR footprint))) OR

AB(Sustainab* OR (Environment* AND (impact OR footprint OR effect OR stewardship)) OR "Climate change" OR "Greenhouse gas*" OR GHG OR "Greenhouse Effect" OR "Water quality" OR Pollution OR "Pollution Control" "Air quality" OR Biodiversity OR "Biodiversity Conservation" OR "Land use" OR "Antibiotic resistance" OR "Climate information" OR "Environment* friendly" OR "Environmental degradation" OR (Carbon N2 (offsets OR footprint)))

OR

KW(Sustainab* OR (Environment* AND (impact OR footprint OR effect OR stewardship)) OR "Climate change" OR "Greenhouse gas*" OR GHG OR "Greenhouse Effect" OR "Water quality" OR Pollution OR "Pollution Control" "Air quality" OR Biodiversity OR "Biodiversity Conservation" OR "Land use" OR "Antibiotic resistance" OR "Climate information" OR "Environment* friendly" OR "Environmental degradation" OR (Carbon N2 (offsets OR footprint))))

Search strategy for Database 5: Business Source Complete

Fields searched: Title OR Abstract OR Keyword

Type of records included: academic journals, trade publications and market research reports

Search terms related to Animal Welfare:

((DE "MARKET surveys" OR DE "CONSUMER confidence" OR DE "CUSTOMER satisfaction" OR DE "BRAND personification" OR DE "BRAND image" OR DE "ADVERTISING avoidance" OR DE "BOYCOTTS" OR DE "CONSUMER complaints" OR DE "CONSUMER preferences" OR DE "WILLINGNESS to pay" OR DE "CONSUMER attitudes" OR DE "CONSUMER ethics" OR DE "CONSUMER expertise" OR DE "CONSUMER research" OR DE "PUBLIC opinion polls" OR DE "PRODUCT acceptance" OR DE "CONSUMER behavior" OR DE "BRAND choice" OR DE "CUSTOMER feedback" OR DE "BUYER'S remorse" OR DE "Public Opinion") OR

TI((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision* OR Valuation OR Support OR "Marketing Costs" OR "Internet forums")) OR

AB((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision* OR Valuation OR Support OR "Marketing Costs" OR "Internet forums")) OR

KW((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision* OR Valuation OR Support OR "Marketing Costs" OR "Internet forums"))))

AND

((DE "BEEF cattle farming" OR DE "CATTLE industry" OR DE "MEAT industry" OR DE "POULTRY industry" OR DE "SWINE industry" OR DE "SWINE farms" OR DE "Broiler chickens") OR

TI(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry" OR "Meat consumption" OR "Beef Industry") OR

AB(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry" OR "Meat consumption" OR "Beef Industry") OR

KW(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry" OR "Meat consumption" OR "Beef Industry"))

AND

((DE "FEED industry" OR DE "ANIMAL rights organizations") OR
 TI(Animal N2 (wel* OR care OR ethics OR emotionality OR emotion* OR cruelty OR rights)
 OR "Livestock care" OR Feed* OR humane OR "Livestock Feed*" OR "Poultry feeding" OR
 moral*) OR
 AB(Animal N2 (wel* OR care OR ethics OR emotionality OR emotion* OR cruelty OR rights)
 OR "Livestock care" OR Feed* OR humane OR "Livestock Feed*" OR "Poultry feeding" OR
 moral*) OR
 KW(Animal N2 (wel* OR care OR ethics OR emotionality OR emotion* OR cruelty OR rights)
 OR "Livestock care" OR Feed* OR humane OR "Livestock Feed*" OR "Poultry feeding" OR
 moral*))

Search terms related to Environmental Impact:

((DE "MARKET surveys" OR DE "CONSUMER confidence" OR DE "CUSTOMER
 satisfaction" OR DE "BRAND personification" OR DE "BRAND image" OR DE
 "ADVERTISING avoidance" OR DE "BOYCOTTS" OR DE "CONSUMER complaints" OR DE
 "CONSUMER preferences" OR DE "WILLINGNESS to pay" OR DE "CONSUMER attitudes"
 OR DE "CONSUMER ethics" OR DE "CONSUMER expertise" OR DE "CONSUMER research"
 OR DE "PUBLIC opinion polls" OR DE "PRODUCT acceptance" OR DE "CONSUMER
 behavior" OR DE "BRAND choice" OR DE "CUSTOMER feedback" OR DE "BUYER'S
 remorse" OR DE "Public Opinion") OR
 TI((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR
 Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR
 viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR
 consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision* OR
 Valuation OR Support OR "Marketing Costs" OR "Internet forums")) OR
 AB((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR
 Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR
 viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR
 consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision* OR
 Valuation OR Support OR "Marketing Costs" OR "Internet forums")) OR
 KW((Consumer* OR Citizen* OR Public OR Customer*) N3 (Attitude OR Behavior OR
 Knowledge OR Preference OR Perception OR Priority OR purchas* OR Values OR View OR
 viewpoint OR Opinion OR Belief* OR Demand OR Willingness-to-pay OR Norms OR
 consumption OR investigation* OR poll* OR surveys OR choice* OR Market OR Decision* OR
 Valuation OR Support OR "Marketing Costs" OR "Internet forums")))

AND

((DE "BEEF cattle farming" OR DE "CATTLE industry" OR DE "MEAT industry" OR DE
 "POULTRY industry" OR DE "SWINE industry" OR DE "SWINE farms" OR DE "Broiler
 chickens") OR

TI(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry" OR "Meat consumption" OR "Beef Industry") OR

AB(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry" OR "Meat consumption" OR "Beef Industry") OR

KW(Livestock OR Meat OR "Farm animal" OR Beef OR cattle OR cow OR bovine OR Pork OR swine OR Hog OR Poultry OR broiler OR chicken* OR "Animal husbandry" OR rearing OR "Meat industry" OR "Meat consumption" OR "Beef Industry")

AND

((DE "ENVIRONMENTAL impact analysis" OR DE "ENVIRONMENTAL management" OR DE "CONSERVATION of natural resources" OR DE "POLLUTION prevention" OR DE "LAND use" OR DE "POLLUTION" OR DE "AIR pollution" OR DE "AIR quality monitoring" OR DE "SOIL pollution" OR DE "CARBON offsetting" OR DE "GREENHOUSE gas mitigation" OR DE "ECOLOGICAL impact") OR

TI(Sustainab* OR (Environment* AND (impact OR footprint OR effect OR stewardship)) OR "Climate change" OR "Greenhouse gas*" OR GHG OR "Greenhouse Effect" OR "Water quality" OR Pollution OR "Pollution Control" "Air quality" OR Biodiversity OR "Biodiversity Conservation" OR "Land use" OR "Antibiotic resistance" OR "Climate information" OR "Environment* friendly" OR "Environmental degradation" OR (Carbon N2 (offsets OR footprint))) OR

AB(Sustainab* OR (Environment* AND (impact OR footprint OR effect OR stewardship)) OR "Climate change" OR "Greenhouse gas*" OR GHG OR "Greenhouse Effect" OR "Water quality" OR Pollution OR "Pollution Control" "Air quality" OR Biodiversity OR "Biodiversity Conservation" OR "Land use" OR "Antibiotic resistance" OR "Climate information" OR "Environment* friendly" OR "Environmental degradation" OR (Carbon N2 (offsets OR footprint))) OR

KW(Sustainab* OR (Environment* AND (impact OR footprint OR effect OR stewardship)) OR "Climate change" OR "Greenhouse gas*" OR GHG OR "Greenhouse Effect" OR "Water quality" OR Pollution OR "Pollution Control" "Air quality" OR Biodiversity OR "Biodiversity Conservation" OR "Land use" OR "Antibiotic resistance" OR "Climate information" OR "Environment* friendly" OR "Environmental degradation" OR (Carbon N2 (offsets OR footprint))))

APPENDIX B: BIBLIOGRAPHIC DETAILS OF INCLUDED STUDIES

Title	Authors	Published Year	Journal
Activists and Animal Welfare: Quality Verifications in the Canadian Pork Sector	Uzea, Adrian D.; Hobbs, Jill E.; Zhang, Jing	2011	Journal of agricultural economics
The role of community-based efforts in promoting sustainable diets: Lessons from a grassroots meat-reduction campaign	Ramsing, Rebecca; Chang, Kenjin Bryan; Hendrickson, Zoé Mistrale; Xu, Zhe; Friel, Madison; Calves, Ellen	2020	Journal of Agriculture, Food Systems, and Community Development
My Meat Does Not Have Feathers: Consumers' Associations with Pictures of Different Chicken Breeds	Del Bosque, C. I. E.; Busch, G.; Spiller, A.; Risius, A.	2020	JOURNAL OF AGRICULTURAL & ENVIRONMENTAL ETHICS
Effects of demographic factors and information sources on United States consumer perceptions of animal welfare	McKendree, M. G.; Cronney, C. C.; Widmar, N. J.	2014	J Anim Sci
Attitudes, perceptions and behaviours regarding meat consumption in Germany: results of the NEMONIT study	Koch, F.; Krems, C.; Heuer, T.; Claupein, E.	2021	JOURNAL OF NUTRITIONAL SCIENCE
Update on animal welfare perception by Italian consumers: A descriptive survey	Rubini, Giulia; Nannoni, Eleonora; Di Pasquale, Jorgelina; Martelli, Giovanna; Sardi, Luca	2021	Italian journal of food safety
Attitudes and Beliefs of Eastern European Consumers Towards Animal Welfare	Tomasevic, I.; Bahelka, I.; Čitek, J.; Čandek-Potokar, M.; Djekić, I.; Getya, A.; Guerrero, L.; Ivanova, S.; Kušec, G.; Nakov, D.; Sołowiej, B.; Stoica, M.; Szabó, C.; Tudoreanu, L.; Weiler, U.; Font, I. Furnols M.	2020	Animals (Basel)
Social Approval of the Community Assessment Model for Odor Dispersal: Results from a Citizen Survey	Tyndall, John C.; Grudens-schuck, Nancy; Harmon, Jay D.; Hoff, Steve J.	2012	Environmental Management
Study on Consumer Preference for Traceable Pork With Animal Welfare Attribute	Chen, M.; Hu, E.; Kuen, L. L.; Wu, L.	2021	Front Psychol
Of Fur, Feather, and Fin: Human's Use and	Byrd, Elizabeth; Fulton, Joan; Widmar, Nicole Olynk	2017	Animals

Concern for Non-Human Species			
Exploring Influences of Different Communication Approaches on Consumer Target Groups for Ethically Produced Beef	Risius, A.; Hamm, U.	2018	JOURNAL OF AGRICULTURAL & ENVIRONMENTAL ETHICS
Assessing Label Frames and Emotional Primes in the Context of Animal Rearing-Response of an Explorative fNIRS Study	Mehlhose, C.; Risius, A.	2021	SUSTAINABILITY
How and Why Does the Attitude-Behavior Gap Differ Between Product Categories of Sustainable Food? Analysis of Organic Food Purchases Based on Household Panel Data	Schäufele, I.; Janssen, M.	2021	Front Psychol
Beef Consumers Behaviour and Preferences-The Case of Portugal	Paiva, T.; Jacinto, T. A.; Sarraguca, M. C.; Coutinho, P.	2022	SUSTAINABILITY
Why environmentalists eat meat	Evon, Scott; Kallis, Giorgos; Zografos, Christos	2019	PLoS One
Media effects on sustainable food consumption How newspaper coverage relates to supermarket expenditures	Bellotti, Elisa; Panzone, Luca	2016	International Journal of Consumer Studies
Meat avoidance: motives, alternative proteins and diet quality in a sample of Swiss consumers	Hagmann, D.; Siegrist, M.; Hartmann, C.	2019	Public Health Nutr
Immediate and 15-Week Correlates of Individual Commitment to a "Green Monday" National Campaign Fostering Weekly Substitution of Meat and Fish by Other Nutrients	Bègue, L.; Treich, N.	2019	Nutrients
Willingness to Pay for Safe Chicken Meat in Bangladesh: A Contingent Valuation Approach	Saha, Sourav Mohan; Prodhan, Masudul Haque; Rahman, Md Shahidur; Haque, A. B. M. Mahfuzul; Iffah, Khandkar; Khan, Md Akhtaruzzaman	2022	Journal of Food Quality
Achieving Transformative Change in Food Consumption in	Haider, Verena; Essl, Franz; Zulka, Klaus Peter; Schindler, Stefan	2022	Sustainability

Austria: A Survey on Opportunities and Obstacles			
Red, yellow, or green? Do consumers' choices of food products depend on the label design?	Carlsson, F.; Kataria, M.; Lampi, E.; Nyberg, E.; Sterner, T.	2022	EUROPEAN REVIEW OF AGRICULTURAL ECONOMICS
Naturally confused: consumers' perceptions of all-natural and organic pork products	Abrams, Katie M.; Meyers, Courtney A.; Irani, Tracy A.	2010	Agriculture and Human Values
Beef animal welfare, attitudes and Willingness to Pay: A regional comparison across the Pyrenees	Sans, P.; Sanjuan-Lopez, A. I.	2015	SPANISH JOURNAL OF AGRICULTURAL RESEARCH
Decoy Effect on Consumers' Purchase Behaviors in Relation to Meat Products: Comparison of Pork and Chicken	Xu, L.; Yu, M.; Chen, X.	2021	Front Psychol
Enabling sustainable food transitions in schools: a systemic approach	Graca, J.; Roque, L.; Guedes, D.; Campos, L.; Truninger, M.; Godinho, C.; Vinnari, M.	2022	BRITISH FOOD JOURNAL
Acceptability and feasibility of a café-based sustainable food intervention in the UK	Graham, Fiona; Barker, Margo; Menon, Manoj; Holdsworth, Michelle	2020	Health promotion international
Context, Orders of Worth, and the Justification of Meat Consumption Practices	Thorslund, Cecilie A. H.; Lassen, Jesper	2017	Sociologia Ruralis
Organic label as an identifier of environmentally related quality: A consumer choice experiment on beef in Italy	Zanoli, R.; Bruschi, V.; Napolitano, F.; Naspetti, S.; Piasentier, E.; Scarpa, R.	2013	Renewable agriculture and food systems
How environmental values influence trust and beliefs about societal oversight and need for regulation of the Australian cattle industry	Witt, G. B.; Althor, G.; Colvin, R. M.; Witt, K. J.; Gillespie, N.; McCrea, R.; Lacey, J.; Faulkner, T.	2021	Environmental Research Letters
Sustainable Food Consumption: Investigating Organic Meat Purchase Intention by Vietnamese Consumers	2021	Sustainability	
Moral Convictions and Meat Consumption—A Comparative Study of the	2021	Animals	

Animal Ethics Orientations of Consumers of Pork in Denmark, Germany, and Sweden			
Trade-Off between Animal Welfare and Environmental Impacts of Beef Production: An Analysis of Presentation Effects on Consumer Choice	Schmiess, J. S.; Lusk, J. L.	2022	JOURNAL OF AGRICULTURAL AND RESOURCE ECONOMICS
Consumer attitudes towards animal welfare and their willingness to pay	Bozzo, G.; Barrasso, R.; Grimaldi, C. A.; Tantillo, G.; Roma, R.	2019	Vet Ital
How Much Credence Does It Take? Evidence on the Trade-Off between Country-Of-Origin Information and Credence Attributes for Beef from a Choice Experiment in Sweden	Lagerkvist, C. J.; Hess, S.; Johansson, H.	2017	FOODS
How consumers' consciousness and perception levels affect purchase intention of organic chicken meat in Turkey	Bolat, B. A.; Kaygisiz, F.; Bulut, D.	2020	TURKISH JOURNAL OF VETERINARY & ANIMAL SCIENCES
Cultured Meat and Australia's Generation Z	Bogueva, Diana; Marinova, Dora	2020	Frontiers in nutrition
Moral Values and Attitudes Toward Dutch Sow Husbandry	Bergstra, Tamara; Gremmen, Bart; Stassen, Elsbeth	2015	Journal of Agricultural & Environmental Ethics
Citizen complaints and environmental regulation of Michigan livestock operations	Hadrich, J. C.; Wolf, C. A.	2011	Journal of animal science
Food Sustainability Knowledge and Attitudes in the Spanish Adult Population: A Cross-Sectional Study	García-González, Ángela; Achón, María; Carretero Krug, Alejandra; Varela-Moreiras, Gregorio; Alonso-Aperte, Elena	2020	Nutrients
Happy or healthy? How members of the public prioritise farm animal health and natural behaviours	Vigors, Belinda; Ewing, David A.; Lawrence, Alistair B.	2021	PLoS ONE
Brazilian Citizens' Opinions and Attitudes about Farm Animal Production Systems	Yunes, Maria C.; Marina, A. G. Von Keyserlingk; Hötzel, Maria J.	2017	Animals

Consumers' Willingness to Pay for Food with Information on Animal Welfare, Lean Meat Essence Detection, and Traceability	Xu, Lingling; Yang, Xixi; Wu, Linhai; Chen, Xiujuan; Chen, Lu; Fu-Sheng, Tsai	2019	International Journal of Environmental Research and Public Health
Using Community Conversations to explore animal welfare perceptions and practices of rural households in Ethiopia	Lemma, M.; Doyle, R.; Alemayehu, G.; Mekonnen, M.; Kumbe, A.; Wieland, B.	2022	Front Vet Sci
CONSEQUENTIALITY BELIEFS AND CONSUMER VALUATION OF EXTRINSIC ATTRIBUTES IN BEEF	Li, X. G.; Jensen, K. L.; Lambert, D. M.; Clark, C. D.	2018	JOURNAL OF AGRICULTURAL AND APPLIED ECONOMICS
Consumers' Evaluation of Stockfree-Organic Agriculture-A Segmentation Approach	Jurkenbeck, K.; Spiller, A.	2020	SUSTAINABILITY
Determinants of Individual Attitudes Toward Animal Welfare-Friendly Food Products	Cembalo, L.; Caracciolo, F.; Lombardi, A.; Del Giudice, T.; Grunert, K. G.; Cicia, G.	2016	Journal of Agricultural and Environmental Ethics
Paying for the Greater Good?—What Information Matters for Beijing Consumers' Willingness to Pay for Plant-Based Meat?	Wang, Hongsha; Chen, Qihui; Chen, Zhu; Bao, Jiale	2022	Foods
Above and beyond meat: the role of consumers' dietary behavior for the purchase of plant-based food substitutes	Kopplin, C. S.; Rausch, T. M.	2022	REVIEW OF MANAGERIAL SCIENCE
Ethical Issues Concerning the Public Viewing of Media Broadcasts of Animal Cruelty	Tiplady, C.; Walsh, D.; Phillips, C.	2015	Journal of Agricultural & Environmental Ethics
Influencing Factors for Sustainable Dietary Transformation-A Case Study of German Food Consumption	Seubelt, N.; Michalke, A.; Gaugler, T.	2022	FOODS
Exploratory Survey on European Consumer and Stakeholder Attitudes towards Alternatives for Surgical Castration of Piglets	Aluwe, M.; Heyrman, E.; Almeida, J. M.; Babol, J.; Battacone, G.; Citek, J.; Furnols, M. F. I.; Getya, A.; Karolyi, D.; Kostyra, E.; Kress, K.; Kusec, G.; Morlein, D.; Semenova, A.; Skrlep, M.;	2020	ANIMALS

	Stoyanchev, T.; Tomasevic, I.; Tudoreanu, L.; Van Son, M.; Zakowska-Biemans, S.; Zamaratskaia, G.; Van den Broeke, A.; Egea, M.		
Consumer trust in animal farming practices – exploring the high trust of Finnish consumers	Jokinen, Pekka; Kupsala, Saara; Vinnari, Markus	2012	International Journal of Consumer Studies
Comparative study on consumers' choice behaviors in selecting pork in rational and irrational scenarios	Xu, L.; Yu, M.; Chen, X.	2022	Front Psychol
First glimpse on attitudes of highly educated consumers towards cell-based meat and related issues in Brazil	Júlia de Paula Soares, Valente; Rodrigo Alonso, Fiedler; Marina Sucha, Heidemann; Carla Forte Maiolino, Molento	2019	PLoS One
Public perceptions of undercover investigations in livestock farming: An end that justifies the means?	Schulze, M.; Risius, A.; Spiller, A.	2021	Animal Welfare
Meat Reduction by Force: The Case of “Meatless Monday” in the Norwegian Armed Forces	Milford, Anna Birgitte; Kildal, Charlotte	2019	Sustainability
Chinese Public Attitudes towards, and Knowledge of, Animal Welfare	Carnovale, F.; Jin, X.; Arney, D.; Descovich, K.; Guo, W.; Shi, B.; Phillips, C. J. C.	2021	Animals (Basel)
Attitudes of the public towards halal food and associated animal welfare issues in two countries with predominantly Muslim and non-Muslim populations	Jalil, N. S. A.; Tawde, A. V.; Zito, S.; Sinclair, M.; Fryer, C.; Idrus, Z.; Phillips, C. J. C.	2018	PLoS One
Demand for value-added pork in Sweden: a latent class model approach	Liljenstolpe, Carolina	2011	Agribusiness
Is the future of meat palatable? Perceptions of in vitro meat as evidenced by online news comments	Laestadius, Linnea I.; Caldwell, Mark A.	2015	Public health nutrition
"Mothers Should Have Freedom of Movement"- Citizens' Attitudes Regarding Farrowing Housing Systems for Sows and Their Piglets	Vandresen, B.; Hotzel, M. J.	2021	ANIMALS

Rationalisation of meat consumption in New Zealand adolescents	Latimer, Kelly R.; Peddie, Meredith C.; Scott, Tessa; Haszard, Jillian J.	2022	Public Health Nutrition
Differences between Vegetarians and Omnivores in Food Choice Motivation and Diatarian Identity	Kim, G.; Oh, J.; Cho, M.	2022	FOODS
Awareness of and reactions to health and environmental harms of red meat among parents in the United States	Grummon, Anna H.; Goodman, Dina; Jaacks, Lindsay M.; Lindsey Smith, Taillie; Chauvenet, Christina A.; Salvia, Meg G.; Rimm, Eric B.	2022	Public Health Nutrition
Taiwanese Consumers' Willingness to Pay for Broiler Welfare Improvement	Yang, Y. C.; Hong, C. Y.	2019	Animals (Basel)
Animal ethics profiling of vegetarians, vegans and meat-eaters	Lund, Thomas B.; McKeegan, Dorothy E. F.; Cribbin, Clare; Sandøe, Peter	2016	Anthrozoös
Australian Generation Z and the Nexus between Climate Change and Alternative Proteins	Bogueva, D.; Marinova, D.	2022	Animals (Basel)
To combine or not to combine? Applying protection motivation theory and the theory of reasoned action to explain and predict intention to reduce meat consumption	Chen, Mei-Fang	2022	Journal of Applied Social Psychology
Sustainable Meat: Looking through the Eyes of Australian Consumers	Lívia Garcez de Oliveira, Padilha; Malek, Lenka	2021	Sustainability
Exploring the Potential of Dutch Pig Farmers and Urban-Citizens to Learn Through Frame Reflection	Benard, Marianne; Cock Buning, Tjard	2013	Journal of Agricultural & Environmental Ethics
Online Chats to Assess Stakeholder Perceptions of Meat Chicken Intensification and Welfare	Howell, T. J.; Rohlf, V. I.; Coleman, G. J.; Rault, J. L.	2016	Animals (Basel)
Australian Public Opinions Regarding the Live Export Trade before and after an Animal Welfare Media Exposé	Sinclair, Michelle; Derkley, Tessa; Fryer, Claire; Phillips, Clive J. C.	2018	Animals

Should Animal Welfare Regulations Be More Restrictive? A Case Study in Eight European Union Countries	Pejman, Niloofar; Kallas, Zein; Dalmau, Antoni; Velarde, Antonio	2019	Animals
Consumers' acceptance of the first novel insect food approved in the European Union: Predictors of yellow mealworm chips consumption	Petrescu-Mag, R. M.; Kopaei, H. R.; Petrescu, D. C.	2022	FOOD SCIENCE & NUTRITION
The Impact of Information on Willingness to Pay and Quantity Choices for Meat and Meat Substitute	Castellari, Elena; Marette, Stéphan; Moro, Daniele; Sckokai, Paolo	2019	Journal of Agricultural & Food Industrial Organization
Sustainable Consumption in Everyday Life: A Qualitative Study of UK Consumer Experiences of Meat Reduction	Mylan, Josephine	2018	Sustainability
Consumers value healthy eating and environmental responsibility: how negative food contexts aid decision-making	Dang, H. D.; Tran, G. T.	2021	FOOD SCIENCE AND TECHNOLOGY
Chinese Consumers' Attitudes and Potential Acceptance toward Artificial Meat		2021	Foods
Have You Switched to a Low-Carbon Diet? The Ultimate Value of Low-Carbon Consumerism	Yu-Ling, Lin; Hong-Wen, Lin	2014	Administrative Sciences (2076-3387)
To Purchase or Not to Purchase? Drivers of Consumers' Preferences for Animal Welfare in Their Meat Choice	Yeh, Ching-Hua; Hartmann, Monika	2021	Sustainability
An Exploratory Study of the Purchase and Consumption of Beef: Geographical and Cultural Differences between Spain and Brazil	Magalhaes, D. R.; Maza, M. T.; Prado, I. N. D.; Fiorentini, G.; Kirinus, J. K.; Campo, M. D.	2022	FOODS
Internalisation of farm animal welfare in consumers' purchasing decisions: A study of pork fillet at point of purchase using the means-end chain and laddering approach	Humble, M.; Palmér, M.; Hansson, H.	2021	Animal Welfare
On (not) knowing where your food comes from:	Cairns, Kate; Johnston, Josée	2018	Agriculture and Human Values

meat, mothering and ethical eating			
Belgian Consumers' Opinion on Pork Consumption Concerning Alternatives for Unanesthetized Piglet Castration	Beirendonck, Sanne; Driessen, Bert; Geers, Rony	2013	Journal of Agricultural & Environmental Ethics
Effect of Environmental Enrichment and Herbal Compounds-Supplemented Diet on Pig Carcass, Meat Quality Traits, and Consumers' Acceptability and Preference	Casal, N.; Font, I. Furnols M.; Gispert, M.; Manteca, X.; Fàbrega, E.	2018	Animals (Basel)
Are mixed meat and vegetable protein products good alternatives for reducing meat consumption? A case study with burgers	Tarrega, A.; Rizo, A.; Murciano, A.; Laguna, L.; Fiszman, S.	2020	Curr Res Food Sci
Testing a novel multicomponent intervention to reduce meat consumption in young men	Amiot, Catherine E.; Boutros, Guy El Hajj; Sukhanova, Ksenia; Karelis, Antony D.	2018	PLoS ONE
Beef meat preferences of consumers from Northwest Italy: Analysis of choice attributes	Merlino, V. M.; Borra, D.; Girgenti, V.; Dal Vecchio, A.; Massaglia, S.	2018	Meat Sci
Consumer Preferences for Animal Welfare in China: Optimization of Pork Production-Marketing Chains	Liang, Yaoming; Cheng, Yu; Xu, Yanjie; Gengrong, Hua; Zheng, Zijian; Li, Hui; Li, Han	2022	Animals
Comparing meat abstainers with avid meat eaters and committed meat reducers	Verain, M. C. D.; Dagevos, H.	2022	Front Nutr
Change in Norwegian consumer attitudes towards piglet castration: increased emphasis on animal welfare	Sødring, Marianne; Nafstad, Ola; Håseth, Torunn Thauland	2020	Acta veterinaria scandinavica
Moral Disengagement in Harmful but Cherished Food Practices? An Exploration into the Case of Meat	Graça, João; Calheiros, Maria Manuela; Oliveira, Abílio	2014	Journal of Agricultural and Environmental Ethics
Is Eating Less Meat Possible? Exploring the Willingness to Reduce Meat Consumption	Szczebyło, Agata; Halicka, Ewa; Rejman, Krystyna; Kaczorowska, Joanna	2022	Foods

among Millennials Working in Polish Cities			
Consumer willingness to pay for environmentally sustainable meat and a plant-based meat substitute	Katare, B.; Yim, H.; Byrne, A.; Wang, H. H.; Wetzstein, M.		APPLIED ECONOMIC PERSPECTIVES AND POLICY
Help the climate, change your diet: A cross-sectional study on how to involve consumers in a transition to a low-carbon society	de Boer, Joop; de Witt, Annick; Aiking, Harry	2016	Appetite
Public Attitudes towards Cow Welfare and Cow Shelters (Gaushalas) in India	Sharma, Arvind; Schuetze, Catherine; Phillips, Clive J. C.	2019	Animals
Rational and moral motives to reduce red and processed meat consumption	Carfora, Valentina; Conner, Mark; Caso, Daniela; Catellani, Patrizia	2020	Journal of Applied Social Psychology
True cost accounting in agri-food networks: a German case study on informational campaigning and responsible implementation	Michalke, A.; Stein, L.; Fichtner, R.; Gaugler, T.; Stoll-Kleemann, S.	2022	SUSTAINABILITY SCIENCE
Consumers' perception of cultured meat relative to other meat alternatives and meat itself: A segmentation study	Cornelissen, K.; Piqueras-Fiszman, B.		JOURNAL OF FOOD SCIENCE
How Choice Experiment Design Affects Estimated Valuation of Use of Gestation Crates	Pozo, V. F.; Tonsor, G. T.; Schroeder, T. C.	2012	JOURNAL OF AGRICULTURAL ECONOMICS
Red and processed meat consumption and purchasing behaviours and attitudes: impacts for human health, animal welfare and environmental sustainability	Clonan, Angie; Wilson, Paul; Swift, Judy A.; Leibovici, Didier G.; Holdsworth, Michelle	2015	Public health nutrition
Telephone Survey Versus Panel Survey Samples Assessing Knowledge, Attitudes and Behavior Regarding Animal Welfare in the Red Meat Industry in Australia	Hemsworth, L. M.; Rice, M.; Hemsworth, P. H.; Coleman, G. J.	2021	Front Psychol
Behind a fluttering veil of trust: The dynamics of public concerns over	Kjærnes, Unni; Borgen, Svein Ole; Christian	2022	Sociologia Ruralis

farm animal welfare in Norway	Bernhard Holth, Thorjussen		
Exploring the Preferences of Consumers' Organic Products in Aspects of Sustainable Consumption: The Case of the Polish Consumer	-	2021	Agriculture
Affective beliefs influence the experience of eating meat	Anderson, Eric C.; Barrett, Lisa Feldman	2016	PLoS ONE
Quantifying the Valuation of Animal Welfare Among Americans	Weathers, Scott T.; Caviola, Lucius; Scherer, Laura; Pfister, Stephan; Fischer, Bob; Bump, Jesse B.; Jaacks, Lindsay M.	2020	Journal of Agricultural & Environmental Ethics
Perceptions and Preconceptions about Chicken and Pork Meat: A Qualitative Exploratory Study of Argentine Consumers in the Metropolitan Area of Buenos Aires	Damico, A. B.; Aulicino, J. M.; Di Pasquale, J.	2020	SUSTAINABILITY
The influence of taste in willingness-to-pay valuations of sirloin steaks from postextraction algal residue-fed cattle	Johnson, M. D.; Miller, R. K.; Morrill, J. C.; Anderson, D. P.; Wickersham, T. A.; Sawyer, J. E.; Richardson, J. W.; Palma, M. A.	2016	Journal of Animal Science
On the Road to End Pig Pain: Knowledge and Attitudes of Brazilian Citizens Regarding Castration	Hötzel, M. J.; Yunes, M. C.; Vandresen, B.; Albernaz-Gonçalves, R.; Woodroffe, R. E.	2020	Animals (Basel)
Developing health and environmental warning messages about red meat: An online experiment	Lindsey Smith, Taillie; Prestemon, Carmen E.; Hall, Marissa G.; Grummon, Anna H.; Vesely, Annamaria; Jaacks, Lindsay M.	2022	PLoS One
The Impact of a Negative Media Event on Public Attitudes Towards Animal Welfare in the Red Meat Industry	Rice, M.; Hemsworth, L. M.; Hemsworth, P. H.; Coleman, G. J.	2020	ANIMALS
Bundling food labels: What role could the labels "Organic," "Local" and "Low Fat" play in fostering the demand for animal-friendly meat	Akaichi, Faical; Glenk, Klaus; Cesar, Revoredo-Giha	2022	Agribusiness

The Trade-Off Between Chicken Welfare and Public Health Risks in Poultry Husbandry: Significance of Moral Convictions	van Asselt, M.; Ekkel, E. D.; Kemp, B.; Stassen, E. N.	2019	Journal of Agricultural & Environmental Ethics
Citizen Attitudes to Farm Animals in Finland: A Population-Based Study	Kupsala, Saara; Vinnari, Markus; Jokinen, Pekka; Pekka, R��s��nen	2015	Journal of agricultural & environmental ethics
Brazilian Consumers' Attitudes towards So-Called "Cell-Based Meat"	Chriki, S.; Payet, V.; Pflanze, S. B.; Ellies-Oury, M. P.; Liu, J.; Hocquette, E.; Rezende-de-Souza, J. H.; Hocquette, J. F.	2021	Foods
How Consumers in the UK and Spain Value the Coexistence of the Claims Low Fat, Local, Organic and Low Greenhouse Gas Emissions	Akaichi, Faical; Cesar Revoredo, Giha; Glenk, Klaus; Gil, Jose Maria	2020	Nutrients
Two Sides of the Same Coin: Environmental and Health Concern Pathways Toward Meat Consumption	Lai, Amanda Elizabeth; Tiroto, Francesca Ausilia; Pagliaro, Stefano; Fornara, Ferdinando	2020	Frontiers in psychology
The Effect of Sustainability-Related Information on the Sensory Evaluation and Purchase Behavior towards Salami Products	Hwang, J.; Lee, S.; Jo, M.; Cho, W.; Moon, J.	2021	Food Sci Anim Resour
Improving Communication in the Red Meat Industry: Opinion Leaders May Be Used to Inform the Public About Farm Practices and Their Animal Welfare Implications	Munoz, C. A.; Hemsworth, L. M.; Hemsworth, P. H.; Rice, M.; Coleman, G. J.	2022	Front Psychol
Consumer attitudes towards production diseases in intensive production systems	Clark, Beth; Panzone, x Luca A.; Stewart, Gavin B.; Kyriazakis, Ilias; Niemi, Jarkko K.; Latvala, Terhi; Tranter, Richard; Jones, Philip; Frewer, Lynn J.	2019	PLoS One
Beef from Calves Finished with a Diet Based on Concentrate Rich in Agro-Industrial By-Products: Acceptability and Quality	Ang��n, E.; Requena, F.; Caballero-Villalobos, J.; Cantarero-Aparicio, M.; Mart��nez-Mar��n, A. L.; Perea, J. M.	2021	Animals (Basel)

Label Preferences in Spanish Meat Consumers			
Evaluating the Perception of Socially Responsible Consumers: The Case of Products Derived from Organic Beef	Pérez-Barea, José Javier; Espantaleón-Pérez, Ricardo; Šedík, Peter	2020	Sustainability
Hedonic plasticity of vegan burger patty in implicit or explicit reference frame conditions	Kim, S.; Chung, S. J.	2022	J Sci Food Agric
Towards the Abandonment of Surgical Castration in Pigs: How is Immunocastration Perceived by Italian Consumers?	Di Pasquale, Jorgelina; Nannoni, Eleonora; Rubini, Giulia; Salvatore, Renato; Bartoli, Luca; Adinolfi, Felice; Martelli, Giovanna; Sardi, Luca	2019	Animals
Consumer Readiness to Reduce Meat Consumption for the Purpose of Environmental Sustainability: Insights from Norway	Austgulen, Marthe Hårvik; Skuland, Silje Elisabeth; Schjøll, Alexander; Alfnes, Frode	2018	Sustainability
Social Norms Support the Protein Transition: The Relevance of Social Norms to Explain Increased Acceptance of Alternative Protein Burgers over 5 Years	Onwezen, Marleen C.; Verain, Muriel C. D.; Dagevos, Hans	2022	Foods
Consumers' preferences for traditional meat products: production system and objective quality cues in Iberian ham	Villanueva, Anastasio J.; Salazar-Ordoñez, Melania; Granado-Díaz, Rubén; Rodríguez-Entrena, Macario	2021	Italian journal of animal science
The effect of information nudges on online purchases of meat alternatives	Segovia, M. S.; Yu, N. Y.; Van Loo, E. J.		APPLIED ECONOMIC PERSPECTIVES AND POLICY
European Markets for Cultured Meat: A Comparison of Germany and France	Bryant, C.; van Nek, L.; Rolland, N. C. M.	2020	Foods
Market Acceptance of Animal Welfare-Improving Biotechnology: Gene Editing and Immunocastration in U.S. Pork	Ufer, Danielle; Ortega, David L.; Wolf, Christopher A.; Swanson, Janice; McKendree, Melissa	2022	Journal of agricultural and resource economics

Factors Affecting Consumers' Cultivated Meat Purchase Intentions	Quevedo-Silva, F.; Pereira, J. B.	2022	SUSTAINABILITY
Public Attitudes to Housing Systems for Pregnant Pigs	Ryan, E. B.; Fraser, D.; Weary, D. M.	2015	PLOS ONE
Does picture background matter? People's evaluation of pigs in different farm settings	Busch, G.; Gauly, S.; von Meyer-Höfer, M.; Spiller, A.	2019	PLoS One
Attitudes towards farm animals as a part of belief systems	Vinnari, Markus; Räsänen, Pekka; Jokinen, Pekka	2013	Anthrozoös
Meat Consumers' Opinion Regarding Unhealthy Pigs: Should They Be Treated with Antibiotics or Euthanized on Farm?		2021	Antibiotics
Moral foundations and credence attributes in livestock production: Canada	Goddard, Ellen; Muringai, Violet; Boaitey, Albert	2019	Journal of Consumer Marketing
The influence of signal attributes on the willingness to pay for pasture-raised beef	Chini, J.; Spers, E. E.; da Silva, H. M. R.; de Oliveira, M. C. J.	2020	RAUSP MANAGEMENT JOURNAL
Consumer Assessment of Sustainability Traits in Meat Production. A Choice Experiment Study in Spain	Eldesouky, Ali; Mesias, Francisco J.; Escribano, Miguel	2020	Sustainability
Insights into German Consumers' Perceptions of Virtual Fencing in Grassland-Based Beef and Dairy Systems: Recommendations for Communication	Stampa, E.; Zander, K.; Hamm, U.	2020	Animals (Basel)
free-rider deficit in the demand for farm animal welfare-labelled meat	Uehleke, Reinhard; Hüttel, Silke	2019	European Review of Agricultural Economics
Painfully aware: The effects of dissonance on attitudes toward factory farming	Prunty, Jared; Apple, Kevin J.	2013	Anthrozoös
Consumer Acceptance of Meat from Animals Reared on Insect Meal as Feed	Szendró, Katalin; Nagy, Mónika Zita; Tóth, Katalin	2020	Animals
Dilemma between health and environmental motives when purchasing animal food products: sociodemographic and	Péneau, Sandrine; Fassier, Philippine; Allès, Benjamin; Kesse-Guyot, Emmanuelle; Hercberg, Serge; Méjean, Caroline	2017	BMC Public Health

nutritional characteristics of consumers			
Current Consumer Perceptions of Animal Welfare across Different Farming Sectors on the Island of Ireland	Sweeney, Sharon; McKernan, Claire; Benson, Tony; Dean, Moira; Regan, Áine; Hanlon, Alison	2022	Animals
Do Consumers Really Care? An Economic Analysis of Consumer Attitudes Towards Food Produced Using Prohibited Production Methods	Balcombe, K.; Bradley, D.; Fraser, I.	2021	JOURNAL OF AGRICULTURAL ECONOMICS
Jumping on the Bandwagon of Responsibility-Or Not? Consumers' Perceived Role in the Meat Sector	Klink-Lehmann, J.; Langen, N.; Simons, J.; Hartmann, M.	2022	SUSTAINABILITY
Not as Bad as I Thought: Consumers' Positive Attitudes Toward Innovative Insect-Based Foods	Junges, J. R.; do Canto, N. R.; de Barcellos, M. D.	2021	Front Nutr
Public Understanding and Attitudes towards Meat Chicken Production and Relations to Consumption	Erian, I.; Phillips, C. J.	2017	Animals (Basel)
Knowledge of Animal Welfare and Consumers' Behavioral Intentions in China: A Moderated Mediation Model of Product Cognition and Empathy	Liang, Yaoming; Gengrong, Hua; Cai, Weiyu; Li, Gen; Wang, Hao; Li, Hui	2022	Animals
European Consumers' Willingness to Pay for Red Meat Labelling Attributes	Cubero Dudinskaya, Emilia; Arsenos, Georgios; Caramelle-Holtz, Emmanuelle; Latvala, Terhi; Martin-Collado, Daniel; Orsini, Stefano; Ozturk, Emel; Naspetti, Simona; Zanolli, Raffaele	2021	Animals
The Role of Education in Sustainable Dietary Patterns in Slovenia	Kirbiš, Andrej; Lamot, Monika; Javornik, Marija	2021	Sustainability
Brand equity in agribusiness: Brazilian consumer perceptions of pork products	De Oliveira, R. O.; Spers, E. E.	2018	RAE-REVISTA DE ADMINISTRACAO DE EMPRESAS
Consumer perception of cured pork meats: the	Gaviglio, A.; Pirani, A.	2015	Czech Journal of Food Sciences

added value of the organic attribute			
You Are What You Eat and So Is Our Planet: Identifying Dietary Groups Based on Personality and Environmentalism	Palnau, J. F.; Ziegler, M.; Lämmle, L.	2022	Int J Environ Res Public Health
Willingness to pay and moral stance: The case of farm animal welfare in Germany	Frey, Ulrich J.; × Frauke, Pirscher	2018	PLoS One
Decomposing the Value of Food Labels on Chicken	Neuhofer, Zachary T.; Lusk, Jayson L.	2021	Journal of Agricultural and Applied Economics
Coping with multiple identities related to meat consumption	Randers, Louise; Grønhøj, Alice; Thøgersen, John	2021	Psychology & Marketing
Gene-Edited Meat: Disentangling Consumers' Attitudes and Potential Purchase Behavior	Martin-Collado, D.; Byrne, T. J.; Crowley, J. J.; Kirk, T.; Ripoll, G.; Whitelaw, C. B. A.	2022	Front Nutr
Legume finishing provides beef with positive human dietary fatty acid ratios and consumer preference comparable with grain-finished beef	Chail, A.; Legako, J. F.; Pitcher, L. R.; Griggs, T. C.; Ward, R. E.; Martini, S.; MacAdam, J. W.	2016	J Anim Sci
Public Perceptions Regarding Genomic Technologies Applied to Breeding Farm Animals: A Qualitative Study	Naab, F. Z.; Coles, D.; Goddard, E.; Frewer, L. J.	2021	BioTech (Basel)
Reaction to a low-carbon footprint food logo and other sustainable diet promotions in a UK University's Student Union 'Living Lab'	Larner, E.; Fish, A.; Way, C. H.; Graham, F.; Armstrong, B.; Patel, V.; Knight, D.; Jourdain, R.; Allen, T.; Armstrong, I. G.; Collister, J. M.; Barnett, O.; Reynolds, C. J.	2021	FUTURE OF FOOD- JOURNAL ON FOOD AGRICULTURE AND SOCIETY
Preferences of German Consumers for Meat Products Blended with Plant-Based Proteins	Profeta, A.; Baune, M. C.; Smetana, S.; Bornkessel, S.; Broucke, K.; Van Royen, G.; Enneking, U.; Weiss, J.; Heinz, V.; Hieke, S.; Terjung, N.	2021	SUSTAINABILITY
The effect of information content on acceptance of cultured meat in a tasting context	Rolland, Nathalie C. M.; Markus, C. Rob; Post, Mark J.	2020	PLoS One

Public support for policies to improve population and planetary health: A population-based online experiment assessing impact of communicating evidence of multiple versus single benefits	Mantzari, E.; Reynolds, J. P.; Jebb, S. A.; Hollands, G. J.; Pilling, M. A.; Marteau, T. M.	2022	Soc Sci Med
A Survey of Chinese Citizens' Perceptions on Farm Animal Welfare	You, Xiaolin; Li, Yibo; Zhang, Min; Huoqi, Yan; Zhao, Ruqian	2014	PLoS One
Perceived Message Effectiveness of the Meatless Monday Campaign: An Experiment With US Adults	Rayala, Hannah-Therese; Rebolledo, Natalia; Hall, Marissa G.; Taillie, Lindsey Smith	2022	American Journal of Public Health
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Consumers' Expectations about Meat from Surgical Castrated or Immunocastrated Male and Female Iberian Pigs	Font-i-Furnols, Maria; Claret, Anna; Guerrero, Luis; Dalmau, Antoni	2022	Animals
Which livestock production claims matter most to consumers?	Ellison, B.; Brooks, K.; Mieno, T.	2017	AGRICULTURE AND HUMAN VALUES
A cross-sectional survey of the readiness of consumers to adopt an environmentally sustainable diet	Culliford, A.; Bradbury, J.	2020	NUTRITION JOURNAL
Eliciting Consumer Preferences for Certified Animal-Friendly Foods: Can Elements of the Theory of Planned Behavior Improve Choice Experiment Analysis?	Nocella, G.; Boecker, A.; Hubbard, L.; Scarpa, R.	2012	PSYCHOLOGY & MARKETING
Food Preferences in Finland: Sustainable Diets and their Differences between Groups	Lehikoinen, E.; Salonen, A. O.	2019	SUSTAINABILITY
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Ethical issues in poultry production - Datasets from a German consumer survey	Busse, M.; Kernecker, M. L.; Siebert, R.	2020	Data Brief
Effectiveness of a Theory-Informed Documentary to Reduce Consumption of Meat and Animal Products: Three Randomized Controlled Experiments	Mathur, M. B.; Peacock, J. R.; Robinson, T. N.; Gardner, C. D.	2021	Nutrients
Less meat in the shopping basket. The effect on meat purchases of higher prices, an information nudge and the combination: a randomised controlled trial	Vellinga, R. E.; Eykelenboom, M.; Olthof, M. R.; Steenhuis, I. H. M.; de Jonge, R.; Temme, E. H. M.	2022	BMC Public Health
German Citizens' Perception of Fattening Pig Husbandry-Evidence from a Mixed Methods Approach	Christoph-Schulz, I.; Rovers, A. K.	2020	AGRICULTURE-BASEL
Are They Buying It? United States Consumers' Changing Attitudes toward More Humanely Raised Meat, Eggs, and Dairy	Spain, C. V.; Freund, D.; Mohan-Gibbons, H.; Meadow, R. G.; Beacham, L.	2018	Animals (Basel)
Virtual farm tours-Virtual reality glasses and tablets are suitable tools to provide insights into pig husbandry	Schütz, A.; Kurz, K.; Busch, G.	2022	PLoS One
ANIMAL WELFARE PERCEPTIONS OF THE U.S. PUBLIC AND COW-CALF PRODUCERS	McKendree, Melissa Gs; Tonsor, Glynn T.; Wolf, Christopher A.	2018	Journal of Agricultural and Applied Economics
Gender and Age Effects on Public Attitudes to, and Knowledge of, Animal Welfare in China	Carnovale, Francesca; Xiao, Jin; Shi, Binlin; Arney, David; Descovich, Kris; Phillips, Clive J. C.	2022	Animals
Moving Consumers along the Innovation Adoption Curve: A New Approach to Accelerate the Shift toward a More Sustainable Diet	Gonera, Antje; Svanes, Erik; Annechen Bahr, Bugge; Hatlebakk, Malin Myrset; Katja-Maria, Prexl; Ueland, Øydis	2021	Sustainability
Beef Credence Attributes: Implications of Substitution Effects on Consumers' WTP	Viegas, I.; Nunes, L. C.; Madureira, L.; Fontes, M. A.; Santos, J. L.	2014	JOURNAL OF AGRICULTURAL ECONOMICS

The Concept of Farm Animal Welfare: Citizen Perceptions and Stakeholder Opinion in Flanders, Belgium	Vanhonacker, Filiep; Verbeke, Wim; Poucke, Els; Pieniak, Zuzanna; Nijs, Griet; Tuytens, Frank	2012	Journal of Agricultural & Environmental Ethics
Exploring the Framing of Animal Farming and Meat Consumption: On the Diversity of Topics Used and Qualitative Patterns in Selected Demographic Contexts	Nijland, H. J.; Aarts, N.; van Woerkum, C. M. J.	2018	Animals (Basel)
Assessing Consumer and Producer Preferences for Animal Welfare Using a Common Elicitation Format	Latacz-Lohmann, U.; Schreiner, J. A.	2019	JOURNAL OF AGRICULTURAL ECONOMICS
Citizens' and Farmers' Framing of 'Positive Animal Welfare' and the Implications for Framing Positive Welfare in Communication	Vigors, B.	2019	Animals (Basel)
The Millennials' Concept of Sustainability in the Food Sector	Bollani, L.; Bonadonna, A.; Peira, G.	2019	SUSTAINABILITY
American Citizens' Views of an Ideal Pig Farm	Sato, P.; Hotzel, M. J.; von Keyserlingk, M. A. G.	2017	ANIMALS
Cross-Cultural Comparison between German, French and Dutch Consumer Preferences for Meat Substitutes	Weinrich, Ramona	2018	Sustainability
Impacts of Animal Well-Being and Welfare Media on Meat Demand	Tonsor, Glynn T.; Olynk, Nicole J.	2011	Journal of agricultural economics
Consumers' and Farmers' Perceptions in Europe Regarding the Use of Composted Bedding Material from Cattle	Klopcic, M.; Erjavec, K.; Waldrop, M.; Roosen, J.; Engel, P.; Galama, P.; Kuipers, A.	2021	SUSTAINABILITY
Attitudes to in vitro meat: A survey of potential consumers in the United States	Wilks, M.; Phillips, C. J.	2017	PLoS One
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Direct Versus Indirect Questioning: An	Lusk, Jayson; Norwood, F.	2010	Social Indicators Research

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Is gene editing an acceptable alternative to castration in pigs?	Yunes, M. C.; Teixeira, D. L.; von Keyserlingk, M. A. G.; Hötzel, M. J.	2019	PLoS One
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Public Response to Media Coverage of Animal Cruelty	Tiplady, Catherine; Walsh, Deborah-Anne; Phillips, Clive	2013	Journal of Agricultural & Environmental Ethics
Consumer Attitudes Towards Alternatives to Piglet Castration Without Pain Relief in Organic Farming: Qualitative Results from Germany	Heid, Astrid; Hamm, Ulrich	2012	Journal of Agricultural & Environmental Ethics
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Improving Food Security through Entomophagy: Can Behavioural Interventions Influence Consumer Preference for Edible Insects?	Bao, H. X. H.; Song, Y.	2022	SUSTAINABILITY
Ethical Concerns in Poultry Production: A German Consumer Survey About Dual Purpose Chickens	Busse, Maria; Kernecker, Maria Lee; Zscheischler, Jana; Zoll, Felix; Siebert, Rosemarie	2019	Journal of Agricultural & Environmental Ethics
Environmental Effects of the Livestock Industry: The Relationship between Knowledge, Attitudes, and Behavior among Students in Israel	Dopelt, K.; Radon, P.; Davidovitch, N.	2019	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH
Animal Ethics and Eating Animals: Consumer Segmentation Based on Domain-Specific Values	Hölker, Sarah; Marie von, Meyer-Höfer	2019	Sustainability
A Steak for Supper if the Cow Did Not Suffer: Understanding the Mechanisms Behind People's Intention to Purchase Animal Welfare-Friendly (AWF) Meat Products	Ardion, Beldad; Hegner, Sabrina	2020	Journal of Agricultural and Environmental Ethics
How do Brazilian citizens perceive animal welfare conditions in poultry,	de Queiroz, R. G.; Domingues, C. H. D.; Canozzi, M. E. A.;	2018	PLOS ONE

beef, and dairy supply chains?	Garcia, R. G.; Ruviaro, C. F.; Barcellos, J. O. J.; Borges, J. A. R.		
Understanding the Interaction between Regulatory Focus and Message Framing in Determining Chinese Consumers' Attitudes toward Artificial Meat	Shi, H.; Ma, P.; Zeng, Y.; Sheng, J.	2022	Int J Environ Res Public Health
Consumer response to the possible use of a vaccine method to control boar taint v. physical piglet castration with anaesthesia: a quantitative study in four European countries	Vanhonacker, F.; Verbeke, W.	2011	ANIMAL
Making More Sustainable Food Choices One Meal at a Time: Psychological and Practical Aspects of Meat Reduction and Substitution	Collier, E. S.; Normann, A.; Harris, K. L.; Oberrauter, L. M.; Bergman, P.	2022	Foods
Differences in public and producer attitudes toward animal welfare in the red meat industries	Coleman, G. J.; Hemsworth, P. H.; Hemsworth, L. M.; Munoz, C. A.; Rice, M.	2022	Front Psychol
Public opinion towards castration without anaesthesia and lack of access to pasture in beef cattle production	Dayane Lemos, Teixeira; Larraín, Rafael; Melo, Oscar; Hötzel, María José	2018	PLoS One
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Exploring Sustainable Food Choices Factors and Purchasing Behavior in the Sustainable Development Goals Era in Spain	Blanco-Penedo, I.; Garcia-Gudino, J.; Angon, E.; Perea, J. M.; Escribano, A. J.; Font-i-Furnols, M.	2021	SUSTAINABILITY
Acceptance of Cultured Meat in Germany- Application of an Extended Theory of Planned Behaviour	Dupont, J.; Harms, T.; Fiebelkorn, F.	2022	FOODS
US Consumer Attitudes toward Antibiotic Use in Livestock Production	Meerza, S. I. A.; Gulab, S.; Brooks, K. R.; Gustafson, C. R.; Yiannaka, A.	2022	SUSTAINABILITY
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Decision to Purchase Organic Chicken Meat			
A multidimensional measure of animal ethics orientation - Developed and applied to a representative sample of the Danish public	Lund, T. B.; Kondrup, S. V.; Sandøe, P.	2019	PLoS One
Farm Animal Welfare, Consumer Willingness to Pay, and Trust: Results of a Cross-National Survey	Nocella, Giuseppe; Hubbard, Lionel; Scarpa, Riccardo	2010	Applied Economic Perspectives & Policy
Rebalancing meat and legume consumption: Change-inducing food choice motives and associated individual characteristics in non-vegetarian adults	Reuzé, Anouk; Méjean, Caroline; Carrère, Myriam; Sirieix, Lucie; Druesne-Pecollo, Nathalie; Péneau, Sandrine; Touvier, Mathilde; Hercberg, Serge; Kesse-Guyot, Emmanuelle; Allès, Benjamin	2022	The International Journal of Behavioral Nutrition and Physical Activity
CHOICE EXPERIMENT PERFORMED ON THE FRESH BLACK SLAVONIAN PIG'S MEAT: A PRELIMINARY STUDY	Milkovic, S. J.; Loncaric, R.; Zmaic, K.; Kranjac, D.; Canavari, M.	2021	POLJOPRIVREDA
Dutch Consumers' Willingness to Pay for Broiler Welfare	Mulder, Machiel; Sigourney, Zomer	2017	Journal of applied animal welfare science
Who Wants Chicken? Uncovering Consumer Preferences for Produce of Alternative Chicken Product Methods	2021	Sustainability	
Positioning Strategies for Animal-Friendly Products: A Social Dilemma Approach	Riemsdijk, Lenka; Ingenbleek, Paul T. M.; Veen, Gerrita; Trijp, Hans C. M.	2020	Journal of Consumer Affairs
Speciesism, altruism and the economics of animal welfare	Lusk, Jayson L.; Norwood, F. Bailey	2012	European Review of Agricultural Economics
Socio-demographic basic factors of German customers as predictors for sustainable consumerism regarding foodstuffs and meat products	Mohr, Manuel; Schlich, Michaela	2016	International Journal of Consumer Studies
Demand for High-Quality Beef Attributes in Developing Countries: The Case of Ecuador	Castillo, María José; Carpio, Carlos E.	2019	Journal of Agricultural and Applied Economics

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Consumer Perceptions of Precision Livestock Farming-A Qualitative Study in Three European Countries	Krampe, Caspar; Serratos, Jordi; Niemi, Jarkko K.; Ingenbleek, Paul T. M.	2021	Animals : an open access journal from MDPI
Health Risk Perception, Consumption Intention, and Willingness to Pay for Pig Products Obtained by Immunocastration	Di Pasquale, J.; Vecchio, Y.; Martelli, G.; Sardi, L.; Adinolfi, F.; Nannoni, E.	2020	Animals (Basel)
Children who choose not to eat meat: A study of early moral decision-making	Hussar, Karen M.; Harris, Paul L.	2010	Social Development
Discrete Choice Analysis of Consumer Preferences for Meathybrids-Findings from Germany and Belgium	Profeta, Adriano; Baune, Marie-Christin; Smetana, Sergiy; Broucke, Keshia; Royen, Geert Van; Weiss, Jochen; Heinz, Volker; Terjung, Nino	2020	Foods (Basel, Switzerland)
Citizens' Views on Farm Animal Welfare and Related Information Provision: Exploratory Insights from Flanders, Belgium	Vanhonacker, Filiep; Poucke, Els; Tuytens, Frank; Verbeke, Wim	2010	Journal of Agricultural & Environmental Ethics
Brazilian Carbon Neutral Beef as an Innovative Product: Consumption Perspectives Based on Intentions' Framework	Lucchese-Cheung, T.; de Aguiar, L. K.; de Lima, L. C.; Spers, E. E.; Quevedo-Silva, F.; Alves, F. V.; de Almeida, R. G.	2021	JOURNAL OF FOOD PRODUCTS MARKETING
Should organic animals be slaughtered differently from non-organic animals? A cluster analysis of German consumers	Kühl, Sarah; Bayer, Elisa; Busch, Gesa	2022	Organic Agriculture
Reducing meat consumption in the USA: a nationally representative survey of attitudes and behaviours	Neff, R. A.; Edwards, D.; Palmer, A.; Ramsing, R.; Righter, A.; Wolfson, J.	2018	Public Health Nutr
Discrete Choice Analysis of Consumer Preferences for Meathybrids—Findings from Germany and Belgium	2021	Foods	
Understanding the factors influencing consumer willingness to accept the	Domingues, C. H. D.; Borges, J. A. R.; Ruviaro,	2020	PLOS ONE

use of insects to feed poultry, cattle, pigs and fish in Brazil	C. F.; Guidolin, D. G. F.; Carrijo, J. R. M.		
Sustainable meat consumption intentions: conceptualisation, scale development and validation	Zahra, S.; McCarthy, B.; Chaiechi, T.	2022	BRITISH FOOD JOURNAL
Do meat anti-consumption opinions influence consumers' wellbeing?-The moderating role of religiosity	Xie, L.; Shahzad, M. F.; Waheed, A.; ul Ain, Q.; Saleem, Z.; Ali, M. A.	2022	FRONTIERS IN PSYCHOLOGY
Two birds, one stone: The effectiveness of health and environmental messages to reduce meat consumption and encourage pro-environmental behavioral spillover	Wolstenholme, Emily; Poortinga, Wouter; Whitmarsh, Lorraine	2020	Frontiers in Psychology
Explaining intention to reduce red and processed meat in the UK and Italy using the theory of planned behaviour, meat-eater identity, and the Transtheoretical model	Wolstenholme, Emily; Carfora, Valentina; Catellani, Patrizia; Poortinga, Wouter; Whitmarsh, Lorraine	2021	Appetite
Comparing Consumer Preferences for Livestock Production Process Attributes Across Products, Species, and Modeling Methods	Widmar, Nicole J. Olynk; Ortega, David L.	2014	Journal of Agricultural and Applied Economics
Can consumers' willingness to pay incentivize adoption of environmental impact reducing technologies in meat animal production?	White, Robin R.; Brady, Michael	2014	Food Policy
Perception and Evaluation of a Pig Fattening Pen Based on Film Material in an Online Survey Experiment with German Citizens	Wernsmann, A.; Wildraut, C.; von Meyer-Hofer, M.; Mergenthaler, M.	2018	GERMAN JOURNAL OF AGRICULTURAL ECONOMICS
Consumer knowledge about protein sources and consumers' openness to feeding micro-algae and insects to pigs and poultry	Weinrich, R.; Busch, G.	2021	Future foods

Citizens' perception of modern pig production in Germany: a mixed-method research approach	Weible, D.; Christoph-Schulz, I.; Salamon, P.; Zander, K.	2016	BRITISH FOOD JOURNAL
Reducing individual meat consumption: An integrated phase model approach	Weibel, Christian; Ohnmacht, Timo; Schaffner, Dorothea; Kossmann, Katharina	2019	Food Quality and Preference
Willingness to adopt a more plant-based diet in China and New Zealand: Applying the theories of planned behaviour, meat attachment and food choice motives	Wang, Ou; Scrimgeour, Frank	2021	Food Quality and Preference
Attitude towards organic meat: an empirical investigation on West Balkans Countries (WBC) consumers	Vukasovic, T.	2013	WORLDS POULTRY SCIENCE JOURNAL
Food labeling and eco-friendly consumption: Experimental evidence from a Belgian supermarket	Vlaeminck, P.; Jiang, T.; Vranken, L.	2014	ECOLOGICAL ECONOMICS
BEEF CONSUMER PREFERENCES IN CHILE: IMPORTANCE OF QUALITY ATTRIBUTE DIFFERENTIATORS ON THE PURCHASE DECISION	Villalobos, P.; Padilla, C.; Ponce, C.; Rojas, A.	2010	CHILEAN JOURNAL OF AGRICULTURAL RESEARCH
Insects in animal feed: Acceptance and its determinants among farmers, agriculture sector stakeholders and citizens	Verbeke, Wim; Sas, Benedikt; Eeckhout, Mia; De Clercq, Patrick; De Smet, Stefaan; Sprangers, Thomas	2015	Animal feed science and technology
European citizen and consumer attitudes and preferences regarding beef and pork	Verbeke, W.; Pérez-Cueto, F. J.; Barcellos, M. D.; Krystallis, A.; Grunert, K. G.	2010	Meat Sci
Flexitarianism in the Netherlands in the 2010 decade: Shifts, consumer segments and motives	Verain, Muriel C. D.; Dagevos, Hans; Jaspers, Patricia	2022	Food quality and preference
Sustainable food consumption. Product choice or curtailment?	Verain, M. C. D.; Dagevos, H.; Antonides, G.	2015	APPETITE
Flemish consumer attitudes towards more sustainable food choices	Vanhonacker, Filip; Van Loo, Ellen J.; Gellynck, Xavier; Verbeke, Wim	2013	Appetite

Belgian citizens' and broiler producers' perceptions of broiler chicken welfare in Belgium versus Brazil	Vanhonacker, F.; Tuytens, F. A. M.; Verbeke, W.	2016	Poult Sci
Pets as family and pigs in crates: Public attitudes towards farrowing crates	Vandresen, Bianca; Hötzel, Maria José	2021	Applied animal behaviour science
Consumers' valuation of sustainability labels on meat	Van Loo, Ellen J.; Caputo, Vincenzina; Nayga, Rodolfo M., Jr.; Verbeke, Wim	2014	Food Policy
Consumer preferences for farm-raised meat, lab-grown meat, and plant-based meat alternatives: Does information or brand matter?	Van Loo, Ellen J.; Caputo, Vincenzina; Lusk, Jayson L.	2020	Food policy
How to position 'mildly sustainable' products: The joint impact of assortment display and price setting	van Herpen, Erica; Fischer, Arnout R. H.; van Trijp, Hans C. M.	2015	Food Quality and Preference
How Normal Meat Becomes Stranger as Cultured Meat Becomes More Normal; Ambivalence and Ambiguity Below the Surface of Behavior	van der Weele, C.; Driessen, C.	2019	FRONTIERS IN SUSTAINABLE FOOD SYSTEMS
How consumers of meat-based and plant-based diets attend to scientific and commercial information sources: Eating motives, the need for cognition and ability to evaluate information	Vainio, Annukka	2019	Appetite
Effects of income and social awareness on consumer WTP for social product attributes	Ubilava, D.; Foster, K. A.; Lusk, J. L.; Nilsson, T.	2010	TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE
Quantitative verification of the correspondence between the Welfare Quality® operational definition of farm animal welfare and the opinion of Flemish farmers, citizens and vegetarians	Tuytens, Frank A. M.; Vanhonacker, Filiep; Van Poucke, Els; Verbeke, Wim	2010	Livestock science
Effect of information provisioning on attitude toward surgical castration of male piglets and	Tuytens, F. A.; Vanhonacker, F.; Langendries, K.; Aluwé, M.; Millet, S.; Bekaert, K.; Verbeke, W.	2011	Res Vet Sci

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The significance of sensory appeal for reduced meat consumption	Tucker, C. A.	2014	APPETITE
Using environmental imperatives to reduce meat consumption: perspectives from New Zealand	Tucker, C.	2018	KOTUITUI-NEW ZEALAND JOURNAL OF SOCIAL SCIENCES ONLINE
Perceptions of behaviors that cause and mitigate global warming and intentions to perform these behaviors	Truelove, H. B.; Parks, C.	2012	JOURNAL OF ENVIRONMENTAL PSYCHOLOGY
Values and cognitive mechanisms: Comparing the predictive factors of Australian meat intake	Trethewey, E.; Jackson, M.	2019	Appetite
Consumer comments about meat anti-consumption	Tosun, P.; Gurce, M. Y.	2018	BRITISH FOOD JOURNAL
On mandatory labeling of animal welfare attributes	Tonsor, G. T.; Wolf, C. A.	2011	FOOD POLICY
U.S. perspective: Meat demand outdoes meat avoidance	Tonsor, G. T.; Lusk, J. L.	2022	Meat Sci
Social-psychological determinants of young consumers' consumption of pork	Tonnesen, M. T.; Grunert, K. G.	2021	FOOD QUALITY AND PREFERENCE
Attitudes and beliefs of Eastern European consumers towards piglet castration and meat from castrated pigs	Tomasevic, I.; Bahelka, I.; Čandek-Potokar, M.; Čitek, J.; Djekić, I.; Djurkin Kušec, I.; Getya, A.; Guerrero, L.; Iordăchescu, G.; Ivanova, S.; Nakov, D.; Sołowiej, B. G.; Szabó, C.; Tudoreanu, L.; Weiler, U.; Font, I. Furnols M.	2020	Meat Sci
A Structural Equation Model of the Factors Influencing British Consumers' Behaviour toward Animal Welfare	Toma, Luiza; McVittie, Alistair; Hubbard, Carmen; Stott, AlistairW	2011	Journal of Food Products Marketing
Eating green. Consumers' willingness to adopt ecological food consumption behaviors	Tobler, C.; Visschers, V. H.; Siegrist, M.	2011	Appetite
Confronting the meat paradox in different cultural contexts:	Tian, Qirui; Hilton, Denis; Becker, Maja	2016	Appetite

Reactions among Chinese and French participants			
A good taste in the meat, a good taste in the mouth - Animal welfare as an aspect of pork quality in three European countries	Thorslund, C. A. H.; Sandoe, P.; Aaslyng, M. D.; Lassen, J.	2016	LIVESTOCK SCIENCE
Prospective 'warm-glow' of reducing meat consumption in China: Emotional associations with intentions for meat consumption curtailment and consumption of meat substitutes	Taufik, Danny	2018	Journal of Environmental Psychology
Food values drive Chinese consumers' demand for meat and milk substitutes	Sun, J.; Ortega, D. L.; Lin, W.	2022	Appetite
Backing biodiversity? German consumers' views on a multi-level biodiversity-labeling scheme for beef from grazing-based production systems	Stampa, Ekaterina; Zander, Katrin	2022	Journal of Cleaner Production
Attitudes of Canadian citizens toward farm animal welfare: A qualitative study	Spooner, Jeffrey M.; Schuppli, Catherine A.; Fraser, David	2014	Livestock science
Cut back or give it up? The effectiveness of reduce and eliminate appeals and dynamic norm messaging to curb meat consumption	Sparkman, Gregg; Macdonald, Bobbie N. J.; Caldwell, Krystal D.; Kateman, Brian; Boese, Gregory D.	2021	Journal of Environmental Psychology
Systems of attitudes towards production in the pork industry. A cross-national study	Sørensen, B. T.; Barcellos, M. D.; Olsen, N. V.; Verbeke, W.; Scholderer, J.	2012	Appetite
Application of theory of planned behaviour in purchasing intention and consumption of Halal food	Soon, Jan Mei; Wallace, Carol	2017	Nutrition and Food Science
How do human values influence the beef preferences of consumer segments regarding animal welfare and environmentally friendly production?	Sonoda, Yuta; Hirooka, Hiroyuki; Oishi, Kazato; Chomei, Yosuke	2018	Meat science
Discussing modern poultry farming systems-	Sonntag, W. I.; Spiller, A.; von Meyer-Höfer, M.	2019	Poult Sci

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Environmental and Climate Impact Perceptions in University Students: Sustainability Motivations and Perceptions Correspond with Lower Red Meat Intake	Slotnick, M. J.; Falbe, J.; Cohen, J. F. W.; Gearhardt, A. N.; Wolfson, J. A.; Leung, C. W.	2022	J Acad Nutr Diet
Simple Eco-Labels to Nudge Customers Toward the Most Environmentally Friendly Warm Dishes: An Empirical Study in a Cafeteria Setting	Slapo, H. B.; Karevold, K. I.	2019	FRONTIERS IN SUSTAINABLE FOOD SYSTEMS
Animal rights, environment, or health? Effects of argument type and dissonance on the attitudes toward the consumption of animals	Silva Souza, Luiz Gustavo; O'Dwyer, Emma	2022	Appetite
Factors influencing changes in sustainability perception of various food behaviors: Results of a longitudinal study	Siegrist, Michael; Hartmann, Christina; Vivianne, H. M. Visschers	2015	Food quality and preference
Impact of sustainability perception on consumption of organic meat and meat substitutes	Siegrist, Michael; Hartmann, Christina	2019	Appetite
Predicting consumer demand responses to carbon labels	Shewmake, Sharon; Okrent, Abigail; Lanka, Thabrew; Vandenbergh, Michael	2015	Ecological economics
Do traditional market consumers care about the halal meat label? A case study in Taiwan	Shang-Ho, Yang	2019	International Food & Agribusiness Management Review
Environmental enrichment in pig husbandry – Citizens' ratings of pictures showing housing elements using an online-survey	Schütz, Aurelia; Busch, Gesa; Sonntag, Winnie Isabel	2020	Livestock science
Do consumers prefer pasture-raised dual-purpose cattle when considering meat products? A hypothetical discrete choice experiment for the case of minced beef	Schulze, Maureen; Spiller, Achim; Risius, Antje	2021	Meat science

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Frying nemo? Experimental evidence on anthropomorphism, animal ethics, and food choice	Schobin, Janosch; Haefner, Gonzalo; León, Anja Köbrich	2022	Appetite
Exploring drivers and barriers for organic poultry consumption	Schipmann-Schwarze, Christin; Hamm, Ulrich	2020	British Food Journal
An Agent-Based Model to Simulate Meat Consumption Behaviour of Consumers in Britain	Scalco, A.; Macdiarmid, J. I.; Craig, T.; Whybrow, S.; Horgan, G. W.	2019	JASSS-THE JOURNAL OF ARTIFICIAL SOCIETIES AND SOCIAL SIMULATION
Validity of a questionnaire measuring motives for choosing foods including sustainable concerns	Sautron, V.; Peneau, S.; Camilleri, G. M.; Muller, L.; Ruffieux, B.; Hercberg, S.; Mejean, C.	2015	APPETITE
Effects of label understanding level on consumers' visual attention toward sustainability and process-related label claims found on chicken meat products	Samant, Shilpa S.; Han-Seok, Seo	2016	Food quality and preference
Quality perception and acceptability of chicken breast meat labeled with sustainability claims vary as a function of consumers' label-understanding level	Samant, Shilpa S.; Han-Seok, Seo	2016	Food quality and preference
The effect of varying educational intervention on consumers' understanding and attitude toward sustainability and process-related labels found on chicken meat products	Samant, Shilpa S.; Crandall, Philip G.; Seo, Han-Seok	2016	Food Quality and Preference
Promoting 'pro', 'low', and 'no' meat consumption in Switzerland: The role of emotions in practices	Sahakian, Marlyne; Godin, Laurence; Courtin, Irène	2020	Appetite
Beyond information seeking: Consumers' online deliberation about the risks and benefits of red meat	Rutsaert, P.; Barnett, J.; Gaspar, R.; Marcu, A.; Pieniak, Z.; Seibt, B.; Lima, M. L.; Fletcher, D.; Verbeke, W.	2015	FOOD QUALITY AND PREFERENCE

Citizens' Perception of Recent Livestock Production Systems in Germany	Rovers, A.; Sonntag, W. I.; Brummer, N.; Christoph-Schulz, I.	2018	GERMAN JOURNAL OF AGRICULTURAL ECONOMICS
Can you have your meat and eat it too? Conscientious omnivores, vegetarians, and adherence to diet	Rothgerber, Hank	2015	Appetite
Gender differences in meat consumption and openness to vegetarianism	Rosenfeld, Daniel L.; Tomiyama, A. Janet	2021	Appetite
Meat tastes good, legumes are healthy and meat substitutes are still strange - The practice of protein consumption among Swedish consumers	Rööös, Elin; de Groote, Annica; Stephan, Andreas	2022	Appetite
The effect of information on beef husbandry systems on consumers' preferences and willingness to pay	Risius, A.; Hamm, U.	2017	Meat Sci
Ethical, moral and social dimensions in farm production practices: a segmentation study to assess Irish consumers' perceptions of meat quality	Regan, A.; Henchion, M.; McIntyre, B.	2018	IRISH JOURNAL OF AGRICULTURAL AND FOOD RESEARCH
Spanish, French and British consumers' acceptability of Uruguayan beef, and consumers' beef choice associated with country of origin, finishing diet and meat price	Realini, C. E.; Font i Furnols, M.; Sañudo, C.; Montossi, F.; Oliver, M. A.; Guerrero, L.	2013	Meat Sci
Meat, myself, and I: The role of multiple identities in meat consumption	Randers, L.; Thøgersen, J.	2022	Appetite
The Effects of COVID-19 on Beef Consumer Preferences and Beliefs in Colombia: A Logit Model Approach	Ramirez, O.; Charry, A.; Diaz, M. F.; Enciso, K.; Mejia, D.; Burkart, S.	2021	FRONTIERS IN SUSTAINABLE FOOD SYSTEMS
Farm animal welfare: A survey of the opinion of farmers and consumers in Sardinia	Pulina, G.; Carta, S.; Pulino, D.; Spanu, S.; Deriu, R.; Mazzette, A.	2022	Animal
A brief nudge or education intervention delivered online can	Prusaczyk, Elvira; Earle, Megan; Hodson, Gordon	2021	Food Quality and Preference

increase willingness to order a beef-mushroom burger			
Who cares about local feed in local food products? Results from a consumer survey in Germany	Profeta, Adriano; Hamm, Ulrich	2019	British Food Journal
Life as a reflexive project: The logics of ethical veganism and meat-eating	Presser, Lois; Schally, Jennifer L.; Vossler, Christine	2020	Society & Animals: Journal of Human-Animal Studies
Consumer choice of broiler meat: The effects of country of origin and production methods	Pouta, E.; Heikkilä, J.; Forsman-Hugg, S.; Isoniemi, M.; Makela, J.	2010	Food quality and preference
Consumer perceptions of conventional and alternative protein sources: A mixed-methods approach with meal and product framing	Possidônio, Catarina; Prada, Marília; Graça, João; Piazza, Jared	2021	Appetite
Consumer consciousness on meat and the environment - Exploring differences	Pohjolainen, Pasi; Tapio, Petri; Vinnari, Markus; Jokinen, Pekka; Räsänen, Pekka	2016	Appetite
The influence of information about nutritional quality, environmental impact and eco-efficiency of menu items on consumer perceptions and behaviors	Plamondon, G.; Labonte, M. E.; Pomerleau, S.; Vezina, S.; Mikhaylin, S.; Laberee, L.; Provencher, V.	2022	FOOD QUALITY AND PREFERENCE
The Impact of Sustainability Aspects in the Meat Sector: A Cluster Analysis Based on Consumer Attitudes and Store Format Choice	Pirsich, Wiebke; Weinrich, Ramona	2019	Journal of International Food & Agribusiness Marketing
'I'll try the veggie burger': Increasing purchases of sustainable foods with information about sustainability and taste	Piester, Hannah E.; DeRieux, Christine M.; Tucker, Jane; Buttrick, Nicholas R.; Galloway, James N.; Wilson, Timothy D.	2020	Appetite
Uncommon Alternative: Consumers' Willingness to Pay for Niche Pork Tenderloin in New England	Picardy, Jamie Ann; Cash, Sean B.; Peters, Christian	2020	Journal of Food Distribution Research
How does consumer knowledge affect environmentally sustainable choices?	Peschel, Anne O.; Grebitus, Carola; Steiner, Bodo; Veeman, Michele	2016	Appetite

Evidence from a cross-country latent class analysis of food labels			
Acceptability of policies to reduce consumption of red and processed meat: A population-based survey experiment	Pechey, Rachel; Reynolds, James P.; Cook, Brian; Marteau, Theresa M.; Jebb, Susan A.	2022	Journal of environmental psychology
Consumer preferences for regional meat products	Paustian, Margit; Reinecke, Franziska-Elisabeth; Theuvsen, Ludwig	2016	British Food Journal
Consumer awareness of culling and animal welfare	Park, Jung Min; Koh, Jo Ho; Kim, Jin Man	2022	Food control
Unsustainable, unhealthy, or disgusting? Comparing different persuasive messages against meat consumption	Palomo-Vélez, Gonzalo; Tybur, Joshua M.; van Vugt, Mark	2018	Journal of Environmental Psychology
Consumer willingness to pay for chicken welfare attributes in Kenya	Otieno, David Jakinda; Ogutu, Sylvester Ochieng	2020	Journal of International Food & Agribusiness Marketing
Perspectives for sustainable consumption: An exploratory study of the discourses and practices of Cordoba's citizens (Argentina)	Ortiz, M. V.; Reisch, L. A.; Reyna, C.	2022	DESENVOLVIMENTO E MEIO AMBIENTE
What do U.S. consumers care about regarding beef and its supply chain?	Ortez, Mario; Widmar, Nicole Olynk; Thompson, Nathan M.; Brad Kim, Yuan H.	2022	Meat science
Demand for farm animal welfare and producer implications: Results from a field experiment in Michigan	Ortega, David L.; Wolf, Christopher A.	2018	Food policy
Retail channel and consumer demand for food quality in China	Ortega, D. L.; Wang, H. H.; Wu, L. P.; Hong, S. J.	2015	CHINA ECONOMIC REVIEW
Identity labels as an instrument to reduce meat demand and encourage consumption of plant based and cultured meat alternatives in China	Ortega, David L.; Sun, Jiayu; Lin, Wen	2022	Food policy
When indifference is ambivalence: Strategic ignorance about meat consumption	Onwezen, Marleen C.; van der Weele, Cor N.	2016	Food Quality and Preference
Consumer willingness to pay for livestock credence attribute claim verification	Olynk, Nicole J.; Tonsor, Glynn T.; Wolf, Christopher A.	2010	Journal of agricultural and resource economics

Fodder enrichment and sustaining animal well-being as methods of improving quality of animal-derived food products, in the aspect of consumer perception and acceptance	Olewnik-Mikolajewska, A.; Guzek, D.; Glabska, D.; Sajdakowska, M.; Gutkowska, K.	2016	ANIMAL SCIENCE PAPERS AND REPORTS
Consumer responses to a future UK food system	O'Keefe, Laura; McLachlan, Carly; Gough, Clair; Mander, Sarah; Bows-Larkin, Alice	2016	British Food Journal
A calibrated auction-conjoint valuation method: Valuing pork and eggs produced under differing animal welfare conditions	Norwood, F. Bailey; Lusk, Jayson L.	2011	Journal of Environmental Economics & Management
A qualitative examination of the motivations behind vegan, vegetarian, and omnivore diets in an Australian population	North, Madelon; Klas, Anna; Ling, Mathew; Kothe, Emily	2021	Appetite
Willingness to pay for other species' well-being	Naald, Brian Vander; Cameron, Trudy Ann	2011	Ecological Economics
Exploring the dynamics of women consumer preference, attitude and behaviour towards meat and meat products consumption in India	Mohan, Kiran; Maheswarappa, Naveena B.; Banerjee, Rituparna	2022	Meat science
Opinions of Non-Vegetarian Consumers Among the Chinese Community in Malaysia Toward Vegetarian Food and Diets	Mohamed, Zainalabidin; Terano, Rika; Shun Jing, Yeoh; Iliyasu, Abdullahi	2017	Journal of food products marketing
Consumer Attitudes Toward Animal Welfare-Friendly Products and Willingness to Pay: Exploration of Mexican Market Segments	Miranda-de la Lama, G. C.; Estevez-Moreno, L. X.; Villarroel, M.; Rayas-Amor, A. A.; Maria, G. A.; Sepulveda, W. S.	2019	JOURNAL OF APPLIED ANIMAL WELFARE SCIENCE
Mexican consumers' perceptions and attitudes towards farm animal welfare and willingness to pay for welfare friendly meat products	Miranda-de la Lama, G. C.; Estévez-Moreno, L. X.; Sepúlveda, W. S.; Estrada-Chavero, M. C.; Rayas-Amor, A. A.; Villarroel, M.; María, G. A.	2017	Meat Sci
Green chicken purchase behavior: the moderating role of price transparency	Mınbashrazgah, Morteza Maleki; Maleki, Fatemeh; Torabi, Maedeh	2017	Management of Environmental Quality

To meat, or not to meat: A longitudinal investigation of transitioning to and from plant-based diets	Milfont, Taciano L.; Satherley, Nicole; Osborne, Danny; Wilson, Marc S.; Sibley, Chris G.	2021	Appetite
Understanding Consumer Demand for Sustainable Beef Production in Rural Communities	Migliore, Giuseppina; Di Gesaro, Mariarosa; Borsellino, Valeria; Ascuito, Antonio; Schimmenti, Emanuele	2015	Calitatea
Animal welfare: establishing a dialogue between science and society	Miele, M.; Veissier, I.; Evans, A.; Botreau, R.	2011	Animal welfare
A multi-national comparison of meat eaters' attitudes and expectations for burgers containing beef, pea or algae protein	Michel, F.; Knaapila, A.; Hartmann, C.; Siegrist, M.	2021	FOOD QUALITY AND PREFERENCE
Consumers' associations, perceptions and acceptance of meat and plant-based meat alternatives	Michel, F.; Hartmann, C.; Siegrist, M.	2021	FOOD QUALITY AND PREFERENCE
ANALYSIS OF EUROPEAN CONSUMER AWARENESS FOR IDENTIFYING ANIMAL-FRIENDLY MEAT: ACCESS TO SUCCESS	Merlino, Valentina Maria; Massaglia, Stefano; Borra, Danielle	2019	Calitatea
Consumer Preferences for Verified Pork-Rearing Practices in the Production of Ham Products	McKendree, Melissa G. S.; Widmar, Nicole Olynk; Ortega, David L.; Foster, Kenneth A.	2013	Journal of Agricultural and Resource Economics
Nudging, formulating new products, and the lifecycle: A qualitative assessment of the viability of three methods for reducing Scottish meat consumption for health, ethical, and environmental reasons	McBey, David; Watts, David; Johnstone, Alexandra M.	2019	Appetite
Consumer awareness of sustainable supply chains: A choice experiment on Parma ham PDO	Mazzocchi, Chiara; Orsi, Luigi; Zilia, Federico; Costantini, Michele; Bacenetti, Jacopo	2022	Science of the total environment
MARKETING STRATEGIES FOR ANIMAL WELFARE	Massaglia, S.; Merlino, V. M.; Borra, D.	2018	QUALITY-ACCESS TO SUCCESS

MEAT IDENTIFICATION: COMPARISON OF PREFERENCES BETWEEN MILLENNIAL AND CONVENTIONAL CONSUMERS			
Segmentation of Australian meat consumers on the basis of attitudes regarding farm animal welfare and the environmental impact of meat production	Malek, L.; Umberger, W. J.; Rolfe, J.	2018	ANIMAL PRODUCTION SCIENCE
Committed vs uncommitted meat eaters: Understanding willingness to change protein consumption	Malek, Lenka; Umberger, Wendy J.; Goddard, Ellen	2019	Appetite
Distinguishing meat reducers from unrestricted omnivores, vegetarians and vegans: A comprehensive comparison of Australian consumers	Malek, Lenka; Umberger, Wendy J.	2021	Food Quality and Preference
Is anti-consumption driving meat consumption changes in Australia?	Malek, L.; Umberger, W.; Goddard, E.	2019	BRITISH FOOD JOURNAL
Eating like there's no tomorrow: Public awareness of the environmental impact of food and reluctance to eat less meat as part of a sustainable diet	Macdiarmid, Jennie I.; Douglas, Flora; Campbell, Jonina	2016	Appetite
How important is healthiness, carbon footprint and meat content when purchasing a ready meal? Evidence from a non-hypothetical discrete choice experiment	Macdiarmid, Jennie I.; Cerroni, Simone; Kalentakis, Dimitrios; Reynolds, Christian	2021	Journal of Cleaner Production
Consumer preferences for and beliefs about slow growth chicken	Lusk, Jayson L.	2018	Poultry science
The role of meat consumption in the denial of moral status and mind to meat animals	Loughnan, Steve; Haslam, Nick; Bastian, Brock	2010	Appetite
Assessing Italians' Preferences for Mountain	Linder, Mikael Oliveira; Sidali, Katia Laura;	2022	Mountain Research and Development (Online)

Beef Production Using a Best–Worst Scaling Approach	Fischer, Christian; Gauly, Matthias; Busch, Gesa		
Paradoxical consumers in four European countries: Meat-eating justification and willingness to pay for meat from animals treated by alternatives to surgical castration	Lin-Schilstra, Li; Fischer, Arnout R. H.	2022	Meat science
Consumers' view on pork: Consumption motives and production preferences in ten European Union and four non-European Union countries	Lin-Schilstra, L.; Backus, G.; Snoek, H.; Mörlein, D.	2022	Meat Sci
Emerging market for pork with animal welfare attribute in China: An ethical perspective	Liang, Y.; Xu, Y.; Lai, D.; Hua, G.; Huang, D.; Wang, H.; Li, H.; Han, L.	2023	Meat Sci
Consumer willingness to pay for beef grown using climate friendly production practices	Li, Xiaogu; Jensen, Kimberly L.; Clark, Christopher D.; Lambert, Dayton M.	2016	Food Policy
Gauging attitudes and behaviours: Meat consumption and potential reduction	Lentz, Garrett; Connelly, Sean; Miroso, Miranda; Jowett, Tim	2018	Appetite
Killing day-old chicks? Public opinion regarding potential alternatives	Leenstra, F.; Munnichs, G.; Beekman, V.; Heuvel-Vromans, E. van den; Aramya, L.; Woelders, H.	2011	Animal welfare
Does environmental friendliness equal healthiness? Swiss consumers' perception of protein products	Lazzarini, G. A.; Zimmermann, J.; Visschers, V. H.; Siegrist, M.	2016	Appetite
Diversifying meat consumption patterns: Consumers' self-reported past behaviour and intentions for change	Latvala, Terhi; Niva, Mari; Johanna, MÄkelÄ; Pouta, Eija; Jaakko, HeikkilÄ; Kotro, Jaana; Forsman-Hugg, Sari	2012	Meat science
Gender differences in purchase intentions and reasons for meal selection among fast food customers - Opportunities for healthier and more sustainable fast food	Lassen, A. D.; Lehmann, C.; Andersen, E. W.; Werther, M. N.; Thorsen, A. V.; Trolle, E.; Gross, G.; Tetens, I.	2016	FOOD QUALITY AND PREFERENCE
Consumer acceptance of blending plant-based ingredients into	Lang, Mark	2020	Food quality and preference

traditional meat-based foods: Evidence from the meat-mushroom blend			
Behind the veil: Social desirability bias and animal welfare ballot initiatives	Lai, Yufeng; Boatey, Albert; Minegishi, Kota	2022	Food policy
Factoring Chinese consumers' risk perceptions into their willingness to pay for pork safety, environmental stewardship, and animal welfare	Lai, John; Olynk Widmar, Nicole J.; Ortega, David L.; Wang, H. Holly	2018	Food control
Reducing meat consumption: Identifying group-specific inhibitors using latent profile analysis	Lacroix, Karine; Gifford, Robert	2019	Appetite
Environmental impact judgments of meat, vegetarian, and insect burgers: Unifying the negative footprint illusion and quantity insensitivity	Kusch, Sarah; Fiebelkorn, Florian	2019	Food quality and preference
Public perceptions of mental capacities of nonhuman animals: Finnish population survey	Kupsala, Saara; Vinnari, Markus; Jokinen, Pekka; Räsänen, Pekka	2016	Society & Animals: Journal of Human-Animal Studies
The sustainability liability revisited: Positive versus negative differentiation of novel products by sustainability attributes	Kunz, Sonja; Florack, Arnd; Campuzano, Ines; Alves, Hans	2021	Appetite
Consumer attitudes towards sustainability aspects of food production: Insights from three continents	Krystallis, Athanasios; Grunert, KlausG; de Barcellos, MarciaD; Perrea, Toula; Verbeke, Wim	2012	Journal of Marketing Management
Meat in context. On the relation between perceptions and contexts	Korzen, Sara; Lassen, Jesper	2010	Appetite
The impact of fat content, production methods and carbon footprint information on consumer preferences for minced meat	Koistinen, L.; Pouta, E.; Heikkilä, J.; Forsman-Hugg, S.; Kotro, J.; Mäkelä, J.; Niva, M.	2013	Food Quality and Preference
A stage model as an analysis framework for studying voluntary change in food choices -	Klöckner, C. A.	2017	Appetite

The case of beef consumption reduction in Norway			
Illuminating the 'animal welfare' consumer via different elicitation techniques	Klink-Lehmann, J.; Langen, N.	2019	Meat Sci
The influence of agritourism on niche meats loyalty and purchasing	Kline, Carol; Barbieri, Carla; LaPan, Chantell	2016	Journal of Travel Research
A cross cultural meat paradox: A qualitative study of Australia and India	Khara, Tani; Riedy, Christopher; Ruby, Matthew B.	2021	Appetite
Young adults' experiences with flexitarianism: The 4Cs	Kemper, J. A.; White, S. K.	2021	APPETITE
Motivations, barriers, and strategies for meat reduction at different family lifecycle stages	Kemper, Joya A.	2020	Appetite
Measuring the consumer benefits of improving farm animal welfare to inform welfare labelling	Kehlbacher, A.; Bennett, R.; Balcombe, K.	2012	Food policy
Public perceptions of how to reduce carbon footprints of consumer food choices	Kause, A.; de Bruin, W. B.; Millward-Hopkins, J.; Olsson, H.	2019	ENVIRONMENTAL RESEARCH LETTERS
Effect of tasting and information on consumer opinion about pig castration	Kallas, Z.; Gil, J. M.; Panella-Riera, N.; Blanch, M.; Font-i-Furnols, M.; Chevillon, P.; De Roest, K.; Tacken, G.; Oliver, M. A.	2013	Meat Sci
Understanding the purchasing behaviour of Taiwanese meat consumers in light of rising sustainability concerns	Jen, Meng Yuan; Wang, Shun-mei	2015	British Food Journal
Motives of consumers following a vegan diet and their attitudes towards animal agriculture	Janssen, M.; Busch, C.; Rödiger, M.; Hamm, U.	2016	Appetite
Adolescents care but don't feel responsible for farm animal welfare	Jamieson, Jen; Reiss, Michael J.; Allen, David; Asher, Lucy; Parker, Matthew O.; Wathes, Christopher M.; Abeyesinghe, Siobhan M.	2015	Society & Animals: Journal of Human-Animal Studies
Fear of climate change consequences and	Hunter, Erik; Rööös, Elin	2016	Food Policy

predictors of intentions to alter meat consumption			
Shrinking the food-print: A qualitative study into consumer perceptions, experiences and attitudes towards healthy and environmentally friendly food behaviours	Hoek, A. C.; Pearson, D.; James, S. W.; Lawrence, M. A.; Friel, S.	2017	APPETITE
Healthy and environmentally sustainable food choices: Consumer responses to point-of-purchase actions	Hoek, A. C.; Pearson, D.; James, S. W.; Lawrence, M. A.; Friel, S.	2017	Food Quality and Preference
Reducing meat consumption in meat-loving Denmark: Exploring willingness, behavior, barriers and drivers	Hielkema, M. H.; Lund, T. B.	2021	FOOD QUALITY AND PREFERENCE
VR outreach and meat reduction advocacy: The role of presence, empathic concern and speciesism in predicting meat reduction intentions	Herrewijn, Laura; De Groeve, Ben; Cauberghe, Verolien; Hudders, Liselot	2021	Appetite
International comparisons, domestic influences and where to next? The case of Irish meat consumption	Henchion, M.; McCarthy, M.; Zimmermann, J.; Troy, D. J.	2022	Meat Sci
Citizens' understanding of welfare of animals on the farm: An empirical study	Heise, H.; Theuvsen, L.	2018	J Appl Anim Welf Sci
What do consumers think about farm animal welfare in modern agriculture? Attitudes and shopping behaviour	Heise, Heinke; Theuvsen, Ludwig	2017	International Food & Agribusiness Management Review
Animal welfare versus food quality: factors influencing organic consumers' preferences for alternatives to piglet castration without anaesthesia	Heid, A.; Hamm, U.	2013	Meat Sci
Consumers' awareness of CSR in the German pork industry	Hartmann, Monika; Heinen, Sarah; Melis, Sabrina; Simons, Johannes	2013	British Food Journal
Our daily meat: Justification, moral evaluation and willingness to substitute	Hartmann, Christina; Siegrist, Michael	2020	Food quality and preference

Measuring consumers' knowledge of the environmental impact of foods	Hartmann, Christina; Lazzarini, Gianna; Funk, Angela; Siegrist, Michael	2021	Appetite
Changing Hearts and Plates: The Effect of Animal-Advocacy Pamphlets on Meat Consumption	Haile, M.; Jalil, A.; Tasoff, J.; Bustamante, A. V.	2021	FRONTIERS IN PSYCHOLOGY
Consumers perception of the meat quality determined by the animal welfare aspects - case study of the Swietokrzyskie voivodeship	Gutkowska, K.; Guzek, D.; Glabska, D.; Batog, A.; Czarniecki, J.; Gantner, A.	2019	ANIMAL SCIENCE PAPERS AND REPORTS
Consumer interest in environmental impact, safety, health and animal welfare aspects of modern pig production: Results of a cross-national choice experiment	Grunert, K. G.; Sonntag, W. I.; Glanz-Chanos, V.; Forum, S.	2018	Meat Sci
How does animal welfare taste? Combining sensory and choice experiments to evaluate willingness to pay for animal welfare pork	Gross, Sabine; Waldrop, Megan E.; Roosen, Jutta	2021	Food quality and preference
Paying for sustainability: A cross-cultural analysis of consumers' valuations of food and non-food products labeled for carbon and water footprints	Grebitus, C.; Steiner, B.; Veeman, M. M.	2016	JOURNAL OF BEHAVIORAL AND EXPERIMENTAL ECONOMICS
Personal Values and Decision Making: Evidence from Environmental Footprint Labeling in Canada	Grebitus, Carola; Steiner, Bodo; Veeman, Michele	2013	American Journal of Agricultural Economics
Understanding meat consumption in later life: A segmentation of older consumers in the EU	Grasso, Alessandra C.; Hung, Yung; Olthof, Margreet R.; Brouwer, Ingeborg A.; Verbeke, Wim	2021	Food quality and preference
The determinants of the intention to purchase animal welfare-friendly meat products in Spain	Gracia, A.	2013	Animal welfare
Meat, beyond the plate Data-driven hypotheses for understanding consumer willingness to	Graça, João; Oliveira, Abílio; Calheiros, Maria Manuela	2015	Appetite

adopt a more plant-based diet			
Green Light for Climate-friendly Food Transitions? Communicating Legal Innovation Increases Consumer Support for Meat Curtailment Policies	Graca, J.; Cardoso, S. G.; Augusto, F. R.; Nunes, N. C.	2020	ENVIRONMENTAL COMMUNICATION-A JOURNAL OF NATURE AND CULTURE
A motivated defense of meat: Biased perceptions of meat's environmental impact	Ginn, Joel; Lickel, Brian	2020	Journal of Social Issues
What effect does the presence of sustainability and traceability certifications have on consumers of traditional meat products? The case of Iberian cured products in Spain	Gaspar, P.; Díaz-Caro, C.; Del Puerto, I.; Ortiz, A.; Escribano, M.; Tejerina, D.	2022	Meat Sci
Intensive vs. free-range organic beef. A preference study through consumer liking and conjoint analysis	García-Torres, S.; López-Gajardo, A.; Mesias, F. J.	2016	Meat science
Understanding consumers' perceptions towards Iberian pig production and animal welfare	García-Gudiño, J.; Blanco-Penedo, I.; Gispert, M.; Brun, A.; Perea, J.; Font, I. Furnols M.	2021	Meat Sci
Swiss consumers' willingness to pay and attitudes regarding dual-purpose poultry and eggs	Gangnat, I. D. M.; Mueller, S.; Kreuzer, M.; Messikommer, R. E.; Siegrist, M.; Visschers, V. H. M.	2018	Poult Sci
The ethics of Halal meat consumption: preferences of consumers in England according to the method of slaughter	Fuseini, Awal; Knowles, Toby G.	2020	Veterinary record
Consumer segmentation based on Stated environmentally-friendly behavior in the food domain	Funk, Angela; Sütterlin, Bernadette; Siegrist, Michael	2021	Sustainable Production and Consumption
Consumer attitudes towards castration of piglets and alternatives to surgical castration	Fredriksen, Bente; Anne Mette Sibeko, Johnsen; Skuterud, Ellen	2011	Research in veterinary science
A focused ethnographic study on the role of health and sustainability in food choice decisions	Fox, Elizabeth L.; Davis, Claire; Downs, Shauna M.; McLaren, Rebecca; Fanzo, Jessica	2021	Appetite

The role and limits of strategic framing for promoting sustainable consumption and policy	Fesenfeld, Lukas P.; Sun, Yixian; Wicki, Michael; Bernauer, Thomas	2021	Global environmental change
Relevant characteristics of food products based on alternative proteins according to European consumers	Faber, I.; Henn, K.; Brugarolas, M.; Perez-Cueto, F. J.	2022	J Sci Food Agric
Enacting public understandings: The case of farm animal welfare	Evans, Adrian B.; Miele, Mara	2019	Geoforum
Consumer attitudes towards farm animal welfare in Argentina, Chile, Colombia, Ecuador, Peru and Bolivia: A segmentation-based study	Estévez-Moreno, Laura X.; Miranda-de la Lama, Genaro C.; Miguel-Pacheco, Giuliana G.	2022	Meat science
Attitudes of meat consumers in Mexico and Spain about farm animal welfare: A cross-cultural study	Estévez-Moreno, Laura X.; María, Gustavo A.; Sepúlveda, Wilmer S.; Villarroel, Morris; Miranda-de la Lama, Genaro C.	2021	Meat science
Visitors' Self-Reported Knowledge and Attitudes about an Animal-Free Exhibit on Animal Welfare	Erasmus, M.; Rollins, J.	2022	J Appl Anim Welf Sci
Interested, indifferent or active information avoiders of carbon labels: Cognitive dissonance and ascription of responsibility as motivating factors	Edenbrandt, A. K.; Lagerkvist, C. J.; Nordstrom, J.	2021	FOOD POLICY
Consumer perceptions and attitudes towards climate information on food	Edenbrandt, Anna Kristina; Lagerkvist, Carl-Johan	2022	Journal of Cleaner Production
Assessing Australian consumer preferences for fresh pork meat attributes: A best-worst approach on 46 attributes	Duong, Chien; Sung, Billy; Lee, Sean; Easton, Julia	2022	Meat science
Consumer's perception on beef sustainability in Porto Alegre, southern Brazil	dos Santos Frei tas, David; de Oliveira, Tamara Esteves; Gianezi, Miguelangelo	2017	Business Management Dynamics
A case-study on profiling Italian consumers of animal-friendly foods	Di Pasquale, J.; Nannoni, E.; Adinolfi, F.; Del Duca, I.; Capitano, F.; Sardi, L.; Vitali, M.; Martelli, G.	2016	ITALIAN JOURNAL OF ANIMAL SCIENCE

Consumer preferences for pig welfare - Can the market accommodate more than one level of welfare pork?	Denver, S.; Sandøe, P.; Christensen, T.	2017	Meat Sci
Consumer preferences for reduced antibiotic use in Danish pig production	Denver, Sigrid; Jensen, Jørgen Dejgård; Christensen, Tove	2021	Preventive veterinary medicine
Is there a potential international market for Danish welfare pork? - A consumer survey from Denmark, Sweden, and Germany	Denver, S.; Christensen, T.; Nordstrøm, J.; Lund, T. B.; Sandøe, P.	2022	Meat Sci
Disentangling direct and indirect effects of credence labels	Dentoni, Domenico; Tonsor, Glynn T.; Calantone, Roger; Peterson, H. Christopher	2014	British Food Journal
'Animal Welfare' Practices along the Food Chain: How Does Negative and Positive Information Affect Consumers?	Dentoni, Domenico; Tonsor, Glynn; Calantone, Roger; Peterson, H. Christopher	2011	Journal of Food Products Marketing
Consumers' attitudes towards lab-grown meat, conventionally raised meat and plant-based protein alternatives	de Oliveira Padilha, Lívia Garcez; Malek, Lenka; Umberger, Wendy J.	2022	Food quality and preference
The impact of broiler production system practices on consumer perceptions of animal welfare	de Jonge, J.; van Trijp, H. C.	2013	Poult Sci
Heterogeneity in consumer perceptions of the animal friendliness of broiler production systems	de Jonge, Janneke; Hans van, Trijp	2014	Food policy
Different shades of grey: Compromise products to encourage animal friendly consumption	de Jonge, Janneke; Hans, C. M. van Trijp; Ivo, A. van der Lans	2015	Food quality and preference
Self-declared attitudes and beliefs regarding protein sources are a good prediction of the degree of transition to a low-meat diet in France	de Gavelle, Erwan; Davidenko, Olga; Fouillet, Hélène; Delarue, Julien; Darcel, Nicolas; Huneau, Jean-François; Mariotti, François	2019	Appetite
Climate change and meat eating: An inconvenient couple?	de Boer, Joop; Schösler, Hanna; Boersema, Jan J.	2013	Journal of environmental psychology
Do EU consumers think about meat reduction when considering to eat a	de Boer, Joop; Aiking, Harry	2022	Appetite

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A combined Nutri-Score and 'Eco-Score' approach for more nutritious and more environmentally friendly food choices? Evidence from a consumer experiment in Belgium	De Bauw, M.; Matthys, C.; Poppe, V.; Franssens, S.; Vranken, L.	2021	FOOD QUALITY AND PREFERENCE
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