

The Impact of Certifications and Labels on Consumer Perceptions of Animal Husbandry Practices in E-Commerce

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Mini Review

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ABSTRACT

As consumer awareness of ethical food production practices increases, transparency in animal husbandry systems significantly influences meat purchasing decisions, particularly in virtual supermarket settings. This review examines how information on farming practices, animal welfare standards, and sustainability affects consumer behavior. Key factors include concerns about animal welfare, environmental sustainability, health perceptions, and price sensitivity. Labeling and certification systems, such as "certified humane" and "USDA organic," play a crucial role in guiding ethical choices. The findings underscore the need for clear, accessible labeling and tiered options that balance ethical concerns with price-conscious demands, promoting humane and sustainable consumer habits.

Keywords: Animal husbandry; Health; Supermarkets; Animal welfare; Consumer

INTRODUCTION

The intersection of animal husbandry systems and consumer perception is increasingly significant as consumers become more aware of food production practices. Animal husbandry involves various methods for raising livestock, each prioritizing different aspects such as efficiency, environmental impact, and animal welfare ^[1]. This growing awareness has led to a heightened demand for ethically produced meat, significantly influencing shopping behaviours, particularly in virtual environments ^[2].

E-commerce and the rise of virtual supermarkets have transformed consumer interactions with products ^[3]. These platforms provide detailed product information that goes beyond mere price and nutrition, incorporating ethical attributes like farming

practices and sustainability ratings [4]. By understanding factors influencing consumer choices-such as animal welfare concerns, environmental sustainability, health perceptions, and price sensitivity-retailers and policymakers can better tailor their strategies [5]. Enhancing transparency, simplifying information, and building trust through reliable certifications in virtual supermarkets can help consumers make informed decisions that align with their ethical values, ultimately contributing to a more humane and sustainable food system [6].

LITERATURE REVIEW

The interplay between animal husbandry systems and consumer perception plays a crucial role in shaping modern food choices, particularly as society becomes more aware of ethical and environmental issues related to food production [7]. This growing consciousness is prompting consumers to critically evaluate their purchasing decisions, seeking products that align with their values [8]. As the demand for ethically produced meat rises, it is essential to understand how different animal husbandry practices influence consumer attitudes and behaviors, especially in the context of virtual supermarkets [9].

Animal husbandry systems and consumer perception

Animal husbandry refers to the practices and systems used to raise livestock, including the methods of feeding, housing, and caring for animals. The primary categories of animal husbandry systems include:

Conventional/intensive farming: Characterized by high-density animal populations, limited space, and maximized production efficiency, often raising concerns over animal welfare, environmental degradation, and food safety [10].

Organic farming: Focuses on natural feed, access to the outdoors, limited use of antibiotics, and higher animal welfare standards.

Free-range systems: Emphasizes the freedom of animals to roam in natural environments, with greater attention to humane treatment and welfare.

Sustainable farming: Practices that prioritize environmental stewardship, minimize resource use, and promote ecological balance, often combined with ethical treatment of animals.

These different systems provide a spectrum of welfare standards and environmental impacts, directly influencing consumer perceptions of meat products. Studies indicate that consumers tend to favour meat products from systems that align with their ethical values, particularly regarding animal welfare, sustainability, and environmental concerns.

Virtual supermarkets and consumer behaviour

With the rise of e-commerce and the increasing prevalence of virtual shopping environments, understanding consumer behaviour in online settings has become crucial. In a virtual supermarket, consumers have access to detailed product information, which can include nutritional facts, price, and importantly, ethical attributes such as farming practices, sustainability ratings, and animal welfare certifications.

Virtual supermarkets allow for controlled, simulated environments where researchers can observe consumer choices and behavior in response to various stimuli, such as labels indicating the type of animal husbandry system used. This setting provides a unique opportunity to study how consumers interact with information and how it influences their decision-making processes without the physical constraints of traditional brick-and-mortar stores.

Factors influencing consumer choice

Animal welfare concerns: Consumers are increasingly conscious of animal welfare issues, and this concern significantly impacts their meat purchasing behavior. Products labeled with certifications like "organic," "free-range," or "animal welfare approved" are often preferred over conventional meat products, even if they come at a higher price. Virtual supermarkets that provide clear, easily accessible information about animal welfare practices tend to see a higher preference for ethically produced meat. The presence of visual labels and additional information regarding the conditions in which animals are raised can positively influence consumer choices.

Environmental sustainability: Environmental concerns are becoming a significant factor in meat purchasing decisions, particularly among younger consumers. Information about the environmental impact of different animal husbandry systems, such as greenhouse gas emissions, water usage, and land degradation, is increasingly influencing consumer behavior. Meat products from sustainable or organic farming systems, which are often marketed as being more environmentally friendly,

tend to be more appealing to consumers who are environmentally conscious.

Health perceptions: Consumers often associate certain animal husbandry systems, such as organic or free-range farming, with higher quality, safer, and healthier meat products. This perception is influenced by the reduced use of antibiotics, hormones, and chemicals in these systems, which consumers believe lead to better nutritional profiles and lower health risks. When virtual supermarkets display health-related information alongside details about farming practices, consumers tend to gravitate toward products that are perceived as healthier and safer, even if they are priced higher.

Price sensitivity: While ethical concerns around animal welfare and sustainability play a significant role in shaping consumer preferences, price remains a critical factor in the decision-making process. In a virtual supermarket, where price comparisons are easily accessible, consumers often weigh the ethical attributes of meat products against their cost. Studies have shown that while some consumers are willing to pay a premium for meat products from higher welfare or more sustainable systems, others prioritize affordability, particularly in lower-income demographics.

Cognitive dissonance and compromise: Many consumers experience cognitive dissonance when their ethical beliefs (such as concern for animal welfare) conflict with their purchasing decisions (such as choosing cheaper conventional meat). Virtual supermarkets provide a platform where consumers can mitigate this dissonance by choosing products that offer a compromise such as meat labeled as “humanely raised” or “sustainably farmed” but at a lower price point than fully organic or free-range options.

DISCUSSION

The role of labeling and certification

Labels and certifications in virtual supermarkets serve as vital tools in communicating the ethical attributes of meat products to consumers. The use of third-party certifications, such as the "Certified Humane," "USDA Organic," or "Fair Trade" labels, increases consumer trust and reassures them that the product aligns with their ethical standards. Research has shown that the presence of clear, trustworthy labeling can significantly influence consumer choices in favor of ethically produced meat.

In virtual environments, the design and placement of these labels can enhance their visibility and impact. Labels that are visually prominent and placed near pricing information can help consumers make informed decisions quickly, while pop-up descriptions or clickable icons that provide detailed explanations of the farming practices can offer deeper insights for more engaged consumers.

Psychological and behavioral insights

Consumer behavior in virtual supermarkets is influenced by various psychological factors, including cognitive load, perceived ease of shopping, and trust in digital information. The availability of detailed information about animal husbandry systems in virtual supermarkets can reduce cognitive load by simplifying the decision-making process. However, too much information or poorly presented data can overwhelm consumers and lead to decision fatigue, ultimately pushing them toward default options such as cheaper conventional meat products.

Trust also plays a critical role. In virtual supermarkets, where consumers cannot physically inspect the products, trust in the provided information, certifications, and labels becomes essential. Studies show that consumers are more likely to choose ethically labeled products if they believe the information is credible and verified by reputable third-party organizations.

Implications for retailers and policymakers

The insights gained from studies on consumer behavior in virtual supermarkets have several implications for retailers and policymakers. Retailers can leverage these findings to promote ethically produced meat products by improving the visibility of labels, simplifying information presentation, and offering tiered options that cater to both ethical and price-conscious consumers. Virtual supermarkets also provide a valuable platform for educating consumers about the impact of their food choices on animal welfare and the environment.

For policymakers, promoting transparency in labeling and establishing clear standards for animal welfare certifications are crucial for ensuring consumer trust. Additionally, policies that encourage or mandate the inclusion of information about animal husbandry systems in online retail environments can help consumers make more informed and ethically aligned choices.

CONCLUSION

Information about animal husbandry systems plays a significant role in shaping consumer choices of meat products, particularly in virtual supermarket settings. As consumers become more aware of the ethical, environmental, and health implications of their food choices, the demand for transparency and ethically produced meat continues to grow. Virtual supermarkets offer a unique platform for influencing consumer behavior through the strategic presentation of information, labeling, and certifications.

Retailers and policymakers have an opportunity to drive positive change in consumer habits by promoting ethically produced meat products and improving the visibility and clarity of information about animal husbandry systems. As the digital marketplace expands, the integration of ethical considerations into virtual shopping environments will be essential for meeting the evolving expectations of consumers and fostering a more sustainable and humane food system.

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