

Animal-sentience messages outperform health-safety messages in promoting cultivated meat to UK pet owners

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Introduction

Cultivated meat (CM) is promoted as a sustainable and animal-friendly alternative to conventional meat. In July 2024, the UK became the first European country to approve CM for pet food, making consumer acceptance a key challenge. Although animal welfare is central to the moral case for CM, industry stakeholders increasingly prioritise health, safety, and economic viability. This study tested whether animal-sentience messaging can increase CM acceptance, especially among pet owners.

Qualitative findings

Across 33 interviews in 12 countries, stakeholders largely framed CM in terms of economic viability rather than moral transformation. They described a move away from a disruptive replacement narrative focused on ending slaughter and displacing conventional meat, toward a more pragmatic non-replacement narrative that fits existing markets, categories, and supply chains.

Animal welfare remained part of the sector's justification, but many saw it as less salient, more polarising, and commercially riskier than other appeals. Instead, stakeholders emphasised consumer and system benefits such as resilience, health, safety, taste, and price, while favouring ingredient-based and blended product strategies that could scale more easily and integrate with familiar products and major food brands.

Moving away from
animal welfare narrative

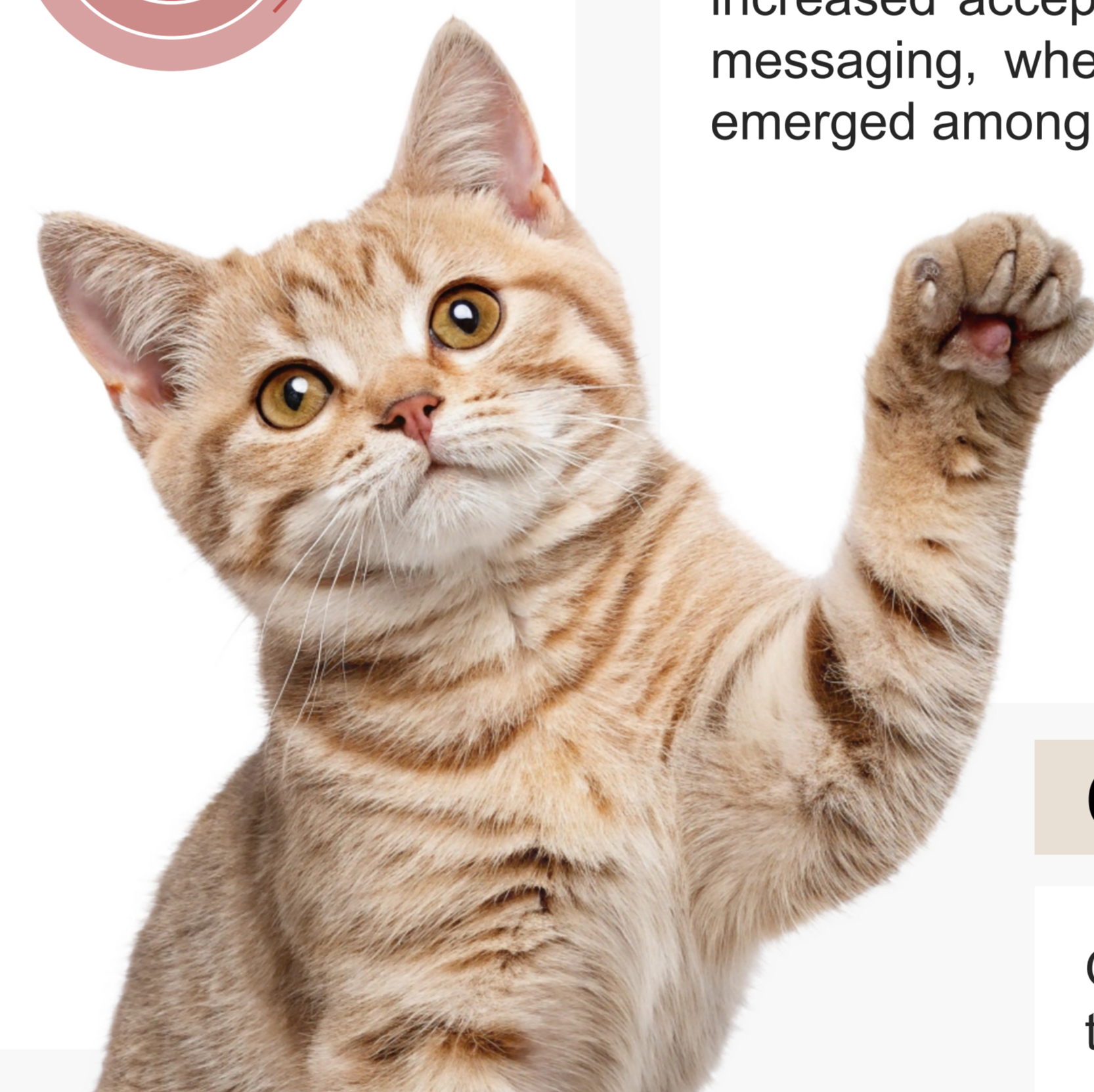
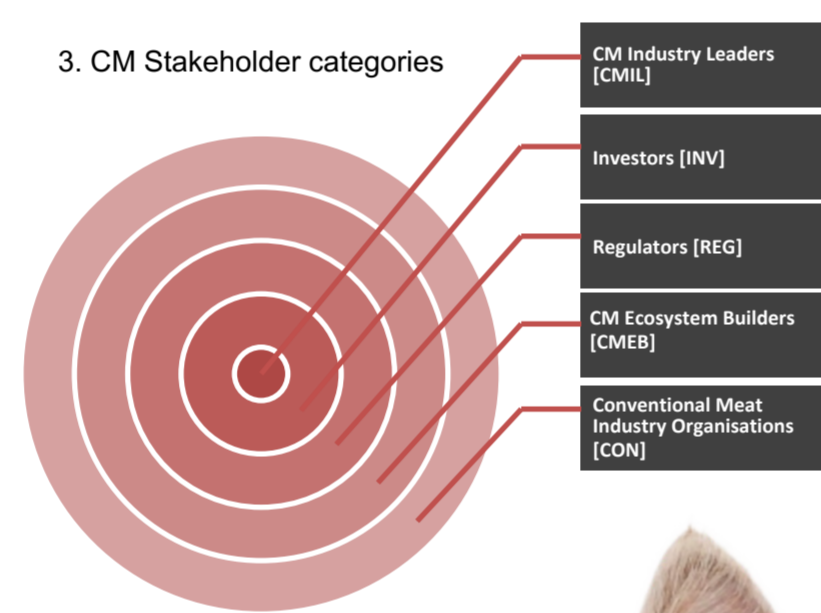
I15: "Ultimately, cultivated meat's value proposition is meeting the additional protein the world will need—the protein transition. In that framing, animal welfare is less central because those additional animals can't exist; we're not replacing animal protein so much as complementing it."

I5: "People say they want sustainability, but they don't pay more for it. That's why we're shifting away from just 'animal-free' and 'sustainable' messaging. We're working on increasing protein and omega-3 content to offer real benefits."

Moving towards
health-focused narrative

I12: "Recently health has worked well—nutrition—because our ingredient is a little healthier than the [conventional counterpart]."

I7: "Sustainability is one reason. For companies that don't prioritize that, health is key. We control the cell culture media, which lets us fine-tune the fatty acid profile—no trans fats, less cholesterol, less saturated fat, and more concentrated flavour. Once scaled, it could be cheaper than using artificial flavours."



Discussion

This study challenges a key assumption within the CM industry: that health and safety framing is more persuasive than animal welfare framing.

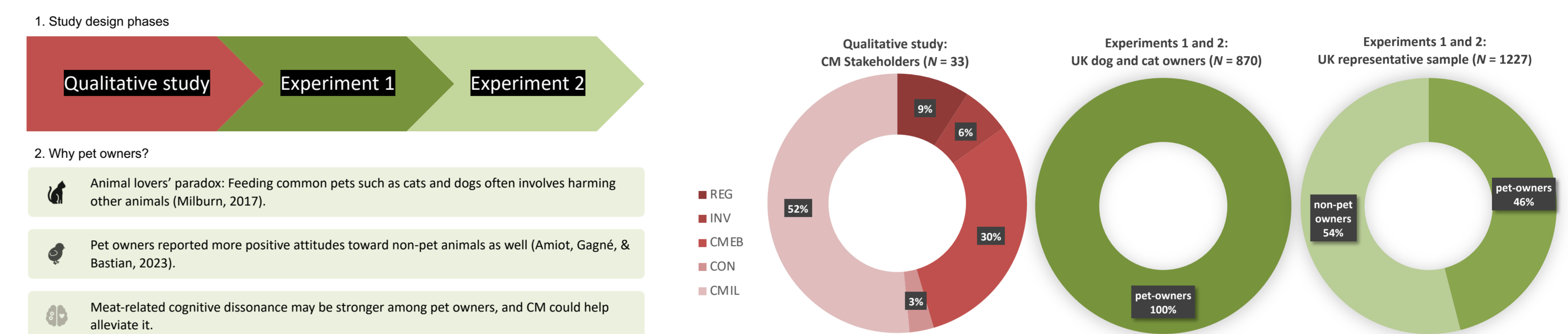
Across two well-powered UK experiments, animal-sentience messages consistently increased CM acceptance, especially among pet owners. These findings suggest that consumer responses are not driven only by self-interested benefits. For some audiences, carefully targeted moral messaging may be more effective.

The qualitative findings help explain why this opportunity may be underused. Industry stakeholders appear to be prioritising messages that seem more economically pragmatic and less polarising, even though this may underestimate the persuasive value of animal-related messaging.

The findings also connect CM to wider literature showing that highlighting animal sentience can reduce willingness to consume conventional meat and increase openness to alternatives.

Methods

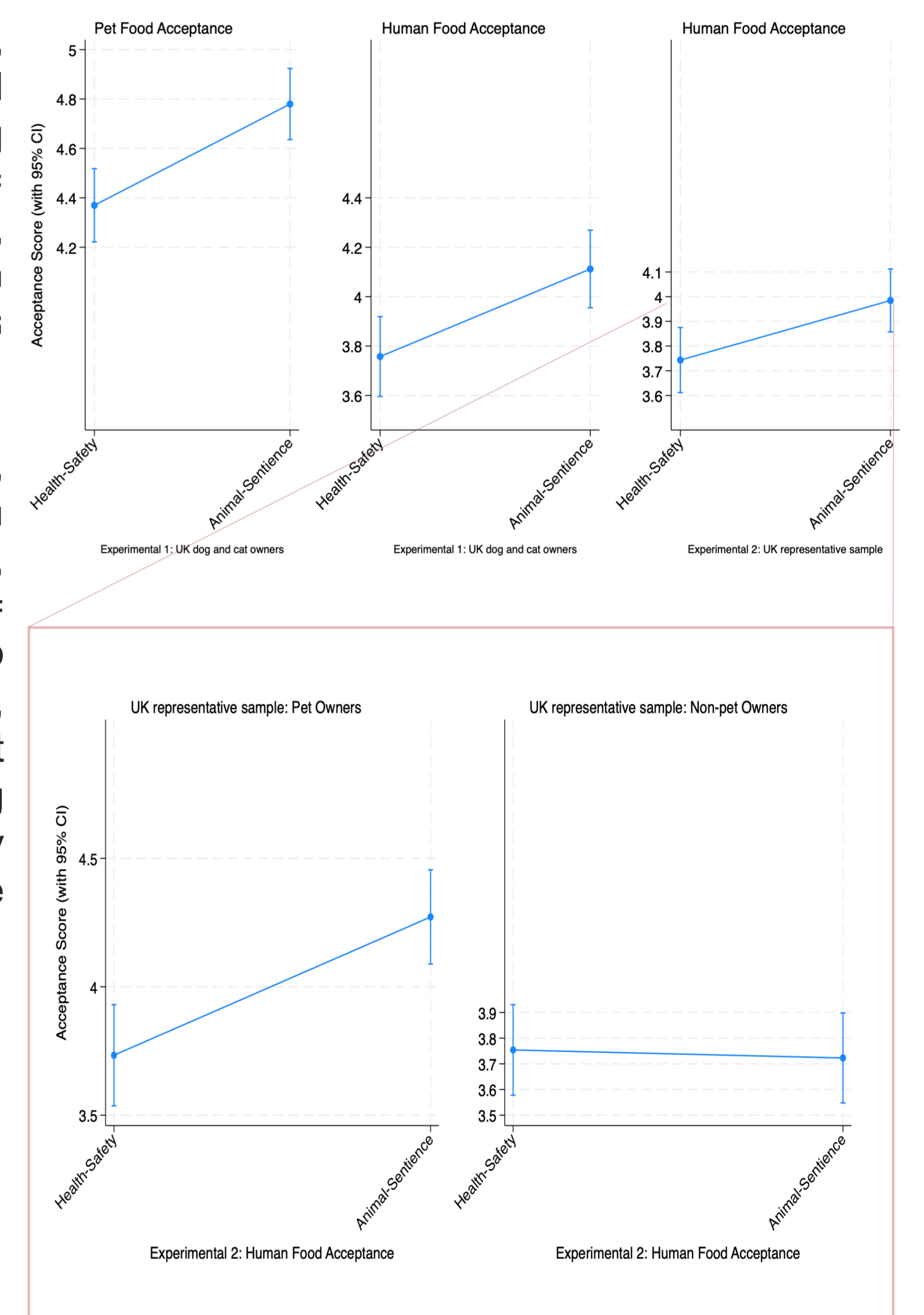
We used a mixed-methods design: 33 stakeholder interviews plus two UK online experiments. Experiment 1 sampled dog and cat owners (N = 870). Experiment 2 used a UK-representative sample (N = 1,227). Both experiments used a 2 × 2 between-subjects design crossing food type (pet food vs human food) and message framing (animal sentience vs health/safety).



Experimental findings

In **Experiment 1** (UK pet owners, N = 870), animal-sentience framing increased acceptance relative to health-safety framing for both human food, $F(1, 866) = 9.54, P = 0.002, \text{partial } \eta^2 = 0.011$, and pet food, $F(1, 866) = 15.18, P < 0.001, \text{partial } \eta^2 = 0.017$. No significant framing × food type interactions were observed.

In **Experiment 2** (UK-representative sample, N = 1,227), animal-sentience framing again increased acceptance of CM as human food, $F(1, 1223) = 6.64, P = 0.010, \text{partial } \eta^2 = 0.005$. A message framing × pet ownership interaction was significant, $F(1, 1219) = 9.29, P = 0.002, \text{partial } \eta^2 = 0.008$: among pet owners, animal-sentience messaging increased acceptance relative to health-safety messaging, whereas no significant difference emerged among non-pet owners.



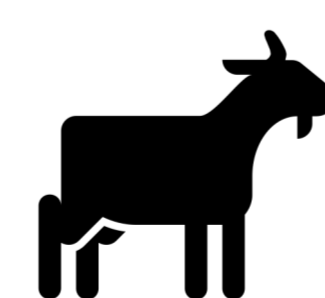
Conclusion

Overall, animal-sentience framing may help support both market acceptance and the broader goal of a more just and sustainable multispecies food system.

Specifically, our study suggests the following:



The industry believes that the health and safety benefits of CM are more compelling to consumers than its contribution to animal welfare.



Consumer research suggests that animal-sentience messages foster higher acceptance of CM than health-safety messages among pet owners, while the effectiveness of the two messages does not differ among non-pet owners.

References

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- Milburn, J. (2017). *The animal lovers' paradox? On the ethics of 'pet food'*. In C. Overall (Ed.), *Pets and people: The ethics of companion animals*. Oxford University Press.