



Overcoming psychological barriers to reducing meat consumption

Summary

Reducing meat consumption is crucial to achieving the required emissions reductions outlined in the Committee on Climate Change Net Zero [report](#). Psychological barriers prevent or impair an individual's willingness or ability to change behaviour; ie eat less or no meat. A rapid evidence synthesis of published literature has found that habits were the biggest barrier to change and had the strongest influence on willingness to reduce meat consumption. There are a number of actionable and tangible recommendations for policy based on this evidence.

The policy recommendations for overcoming psychological barriers should be read in conjunction with the wider literature on external and environmental barriers to reducing meat consumption, as reductions in meat consumption cannot be achieved by overcoming psychological barriers to change alone.

Recommendations for policy

- Existing habits are the strongest indicator of current behaviour, and most significant barrier to change. Interventions should therefore target repeated behaviours, and create an external forcing factor such as social norm shift, environmental restructuring, increased nutritional literacy or interventions aligned with health messages.
- Messaging and framing of communications should be tailored to individual/group underlying values; further research is needed to better understand these.
- The relationship between health and reducing meat consumption for environmental and climate reasons could be used to align target behaviours with individual values.
- Small behavioural steps are assumed to be 'easier'; therefore, incremental interventions that build towards target behaviours could be useful. Difficulty in reducing meat consumption manifests at individual (nutritional literacy) to societal (social norms) levels; policy needs to be multi-pronged.
- The potential for co-benefits across other high impact pro-environmental behaviours (ie consumption patterns more broadly) and other social issues (ie health) is high. Cross-cutting policy is required to achieve this, and to avoid rebound effects or inadvertent repercussions.

The challenge

The climate impact of meat consumption and agriculture more broadly, is estimated to account for approximately a third of global emissions^[1]. Reducing meat consumption through shifting to a plant-based diet, finding meat alternatives or simply reducing meat consumed can have a significant impact on an individual's and national emissions profile. Meat consumption is classified as a high impact behaviour, and overcoming psychological barriers to reduction can be a long term strategy that creates a societal shift.

Research on spillover behaviours suggests that changing one pro-environmental behaviour, such as reducing your meat consumption can have co-benefits across other behavioural domains^[2] therefore indicating the potential for multiple sources of emissions reductions from a singular policy focus.

The method

This rapid evidence review was conducted between March-April 2020.

Literature Search: The literature search was developed through a conceptual and keyword map. Database searches resulted in 277 records. Records were sifted twice, with 60 studies included in full paper review, and 7 studies in the full analysis.

Analysis: Data was extracted on study design, impact of psychological barriers, impact of co-variates, and policy recommendations.

Critical Appraisal^[3]: Five studies had clear, rigorous methods and well-grounded outcomes. The synthesis weighted those more heavily.

Synthesis: Inductive thematic synthesis was conducted in order to identify conceptual and empirical groups of findings.

The results

The following were identified as barriers to change: habits, difficulty associated with new behaviours, emotional attachment/enjoyment of meat, knowledge of environmental impact of meat, perception of threat of climate change, and values.

Habits were found to have the greatest degree of impact, and values and attitudes were often identified

as co-variates to other barriers.

Several psychological barriers that manifested as gaps between self-perception and behaviour emerged from the synthesis. These included gaps between: knowledge (of impacts and of norms) and self-efficacy; values and resultant habits; and understanding of own barriers and actual barriers. Policy should aim to bridge these gaps to overcome psychological barriers to change. Considering **behaviour as a complex system** avoids creating a behavioural rebound effect.

The strongest policy recommendation is for appropriate and tailored **messaging and framing**. Messages need to be tailored to value groups, otherwise they are at risk of being counterproductive (ie high meat attachment individuals resisting a plant-based diet; meat alternatives would be more appropriate^[4]). Three studies found that **understanding the climate impacts** of meat was a significant barrier; however, another study found **values** a more significant factor. Knowledge building interventions should also build capacity and perceived self-efficacy. **Health** benefits were found to be strong motivation to reduce meat consumption, but one study found this belief is moderated by **values and emotional attachment** to meat. Therefore, values were found to be both moderating and direct barriers to change. Policy should ensure values are considered fully when creating targeted interventions.

More information

For more information please contact Catherine Graves (ee14cg@leeds.ac.uk).

Pre-prints and protocol can be found here: [DOI 10.17605/OSF.IO/URW64](https://doi.org/10.17605/OSF.IO/URW64)

N8 AgriFood Food Systems Policy Hub

Email: policy@n8agrifood.ac.uk

Website: <https://policyhub.n8agrifood.ac.uk>

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