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Consumer ranked likely effectiveness of interventions to reduce meat consumption

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There are potential health and environmental benefits to reducing meat consumption among populations where consumption is high[(1)]. However, meat is a staple part of the diet for many, and large-scale dietary shift is difficult to achieve. We sought to investigate current attitudes to meat and plant-based foods, intentions reduce meat consumption over the next three months, and potential policies and interventions current meat eaters believed could help them to eat less meat and more plant-based foods.

We conducted an online survey (n = 1590) of people living in Scotland, stratified by age, gender, ethnicity, and educational attainment. Of this sample, 95% (n = 1504) described their diet as either omnivorous (84%) or flexitarian (11%). In addition to questions about intentions to reduce meat we presented statements framed around the COM-B model of behaviour[(2)] to measure people's perceptions of their Capacity, Opportunities and Motivation to change Behaviour, in this case reducing meat consumption. Latent Class Analysis (LCA) was conducted using these COM-B statements in order to identify disparate segments of the population based on underlying attitudes and beliefs. Current meat eaters were also asked to rank 25 different potential policies or interventions that have been identified in previous work[(3,4)], using a best-worst scaling method where they were asked to choose the option they believed would be most effective for them personally, and the one which would be least effective, from a choice of four interventions. This was repeated ten times for each respondent, with a ranking then calculated using a conditional logit model.

Considering only meat eaters, sociodemographic variables such as age (Cramer's $V = 0.1$, $p<0.001$), gender ($V = 0.09$, $p = 0.03$) and education ($V = 0.09$, $p<0.001$) were weak predictors of intentions to reduce meat. The LCA, based on responses to the COM-B statements, revealed four distinct groups. One group (14% of the sample) appeared unwilling to reduce consumption, one was more ambivalent (25%), another group was broadly willing (45%), and the last reported to be actively reducing consumption (14%). Regarding the perceived utility of potential policy and intervention options, there were broad similarities among the four population groups, with options related to the cost and improvement of current vegetarian options (taste and availability) considered most impactful for all. In contrast, interventions that sought to provide information and educate (e.g., leaflets or celebrity endorsement) were considered least likely to facilitate change by all four groups.

There is a willingness to reduce meat consumption among a majority (59%) of the population, and there appear to be concrete policy and intervention options that could target them. There are also potentially more targetted policy options, which could target those who currently consume more meat and are less likely to consider eating less.

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