

Pathways to Veganism:

Exploring Effective Messages in Vegan Transition

FINAL REPORT

Professor Claire Parkinson & Dr Richard Twine

Dr Naomi Griffin

Centre for Human Animal Studies (CfHAS), Edge Hill University, UK.



Edge Hill University



Principal Investigators: Professor Claire Parkinson (Edge Hill University), Dr Richard Twine (Edge Hill University).

Lead authors: Professor Claire Parkinson and Dr Richard Twine

Contributing author: Dr Naomi Griffin

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Contact information:

Edge Hill University
St Helens Road
Ormskirk
Lancashire
L39 4QP

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Edge Hill University is based on an award-winning 160-acre campus in Lancashire. The University is one of the select few universities to have held the Times Higher Education University of the Year title (2014/15). Edge Hill is ranked Gold in the Teaching Excellent Framework (TEF).

The Edge Hill University **Centre for Human / Animal Studies** (CfHAS) is an interdisciplinary centre for research and activities that engage with the complex material, ethical and symbolic relationships between humans and other animals. It was the first centre of its kind to be established in the UK in 2014. CfHAS is co-directed by Professor Claire Parkinson and Dr Richard Twine. The Pathways to Veganism project is led by Professor Parkinson and Dr Twine and supported by Postdoctoral Research Assistant Dr Naomi Griffin.

Founded in 1944, **The Vegan Society** is a registered educational charity that provides information and guidance on various aspects of veganism. Dr Lorna Brocksopp is Research Officer and co-ordinates the Research Advisory Council. Dr Brocksopp is project liaison for the Pathways to Veganism project.

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1. Executive Summary

Veganism as a practice is growing in the UK. In the last decade veganism has had increased visibility in mainstream media and there has been a rapid expansion of vegan-friendly products in the marketplace. 'Celebrity vegans', media coverage and public information about the relationship between animal agriculture and climate change, health issues linked to meat and dairy consumption, food scares and the treatment of animals in the animal agriculture system have all contributed to changing attitudes towards veganism. In a move welcomed by some vegan advocacy organisations, Public Health England advice on eating healthily changed in 2016 to highlight non-meat sources of protein and to emphasise food products that are considered more environmentally sustainable. NHS public guidance states that a well-planned vegan diet can meet the nutritional needs at all life stages, a position echoed by the British Dietetic Association (BDA) in 2017. Recent polls suggest that the number of people in the UK who identify as vegan continues to grow although there is a marked difference in terms of gender, with women accounting for around two thirds of the vegan population in the UK.

Despite the increase in media coverage and greater public information on meat and dairy consumption and its impacts on climate change, human health and animal welfare, knowledge about these issues remains low in the general population. Coupled with this, cultural and social norms established in the post-war period of the twentieth century have reinforced meat and dairy consumption patterns in the UK. Cheap food and particularly cheap meat products, a result of the intensification of the animal agriculture industries, have further normalised meat consumption. Veganism continues to be misunderstood, vegan stereotypes remain evident in popular culture and despite its growth, veganism remains a minority practice.

This research project was developed with funding from The Vegan Society and Edge Hill University. The research aimed to gain insights into how non-vegans perceive and understand veganism and vegans. Adopting a mixed methods approach, the research involved a questionnaire, household interviews and focus groups.

The findings from this project tell us that the perceived barriers to veganism include cost, concerns about nutrient and calorie deficiencies, convenience, the time it takes to read labels to identify animal ingredients, the time it takes to cook from scratch, perceptions of veganism being restrictive, that vegans are unhealthy, and that meat and dairy consumption is natural. Of these, convenience and health concerns predominate in discussions about difficulties associated with veganism. Concerns over nutritional deficiencies and concerns related to a pre-existing health condition were significant. 31% of questionnaire respondents expressed nutritional concerns about a vegan diet and over 52% reported that they would have health concerns about becoming vegan.

However, over 84% of non-vegans thought that veganism could be a healthy way of eating. Respondents who reported that they had vegan friends or family had a considerably more positive view of the healthiness of veganism. In focus groups pro-vegan health messages were seen to have greater credibility than pro-vegan environmental or animal ethics

messages. There was greater engagement with health messages and participants indicated that they have already or would in future pass on health information about veganism to a close friend or family member. When asked to rate different types of pro-vegan messages, those from health and academic sources were judged most credible while media and advocacy group messages judged less credible. In the latter cases this was due to widely held views that media and advocacy groups had self-serving agendas while health institutions were perceived to be concerned with the well-being of others and academics considered to have objectivity.

Familial dynamics are a major barrier to transition, reduction or even maintenance of veg*n¹ eating practices. This may include feelings of awkwardness, discomfort, or embarrassment in asking for veg*n food when in a close relative's home. Individuals may alter their preferred dietary practices to accommodate a partner or relative especially when obstacles such as making more than one meal arise. However, familial dynamics are also a major pathway to reduction and transition. Vegan family members increase familiarity and knowledge of veganism for non-vegans. Non-vegans who value the inclusion of eating as part of regular socialising practices with vegans in their family or social circle, those who cook for vegan family members or friends tend to be open to imagining vegan transition in positive terms. They are also more likely to have tried and enjoyed vegan food.

The vegetarians in this study indicate that their eating practices are increasingly performed in relation to, and under the influence of, veganism. The majority of vegetarians interviewed were eliminating animal products beyond the typical vegetarian exclusion of meat. In this study, attachments to meat and dairy were seldom expressed in singular terms. Pairings or multiple justifications for eating meat and dairy are entwined and usually conceived as beneficial to the individual, for example taste, healthiness, texture and convenience. However, there is a loosening of the association between meat and health. Meat is constructed as healthy and unhealthy and the meanings assigned to meat are now highly divergent. Where restriction takes place for reasons of health, meat is viewed as a treat, something not to be eaten regularly. Vegetables, by comparison, have robust associations with health and wellbeing.

High levels of cynicism towards celebrity and media generally can impact on the reception of pro-vegan messages. Messages that were assigned to celebrities were judged to have little or no credibility and were not considered trustworthy sources of information about veganism. Despite a cynicism towards celebrity generally and low levels of trust in pro-vegan claims by celebrities, the high level of interest in celebrity lifestyles would drive non-vegans to read about celebrity vegans. Participants expressed the view that images of vegan strength athletes and sportspeople challenged general stereotypes and their own views about what vegan bodies 'should' look like. The credibility of claims to being a 'vegan sportsperson' are reliant on length of time as a vegan and improvements to performance. Sportspeople who have been vegan for a year or more are more likely to have credibility than those who have been vegan for less than 12 months and those who have

¹ Veg*n is used as a shorthand for vegetarian/vegan

demonstrated improvement after becoming vegan are likely to have even greater credibility.

Those in over-55 age groups who might be regarded as more resistant to pro-vegan messages and less likely to engage with such messages are still likely to self-exclude individual animal products for ethical and health reasons and that self-exclusion practice will have longevity. Some participants in this study who identified as omnivores had self-excluded certain animal products for forty years or more. Self-excluders tended to regard themselves as highly resistant to pro-vegan messages, felt that they were well informed about animal welfare, and were more likely to hold the strong belief that diet is a personal choice. Many people in age groups 55 and over were critical of current animal agriculture practices. Over 55s in this study were familiar with and receptive to health messages about meat reduction or exclusion, and increased fruit and vegetable consumption. Resistance increased when these were discussed in the context of a pro-vegan message. Participants over 45 were more likely than participants under 45 to identify a pro-vegan animal ethics message as credible. This may be because these participants were more likely to self-exclude and therefore more likely to identify an ethics message that aligned with their exclusion practices.

In the under 45 age groups there was a tendency to reject advocacy campaigns on the basis of a perception of emotional manipulation but not because there was a particular objection to the message itself. Indeed, many of these participants expressed the view that they were concerned about or opposed to farming practices that were detrimental to animal welfare. In the 18-24 age group avoidance of emotional manipulation and a perceived lack of sophistication in communication strategies by advocacy groups reflected widespread tendencies to ridicule such approaches on social media in the form of memes or social media comments.

Recommendations arising from this project

- Vegan advocacy organisations should respond to the health-related findings of this study. Networking with health professionals to communicate to the public on wide ranging and detailed aspects of plant-based nutrition, and working with health-related organisations and relevant charities to address the concerns of people with pre-existing health conditions are two clear areas that should be addressed.
- Constructing vegan meals as adaptable to other tastes and preferences might address some difficult familial dynamics around veganism. Where vegan meals are reframed as easily adaptable by simply adding another non-vegan component can benefit those who might otherwise feel that they have to accommodate the preferences of non-vegan family or friends.

- Talking about eating practices may help with transition or reduction. The process of talking about and reflecting on food practices may offer an important route by which reduction or vegan transition can be supported. In this regard, public community workshops that incorporate different processes of reflection (arts-based methods, discussion groups etc) might be one way in which a vegan transition is enabled for some.
- Given the findings in this study which underline the relationship and familial context of food practices, vegan pledge schemes should reconsider their focus on individuals. Monthly vegan pledges and vegan transition campaigns may be more successful if they account for these dimensions from the outset, focusing on relationships and families.
- Vegan advocacy organisations should do more to catalogue and communicate the growing range of vegan foods available to consumers in the UK within mainstream high street and smaller outlets.
- Further research is recommended to better judge whether there is a decline of vegetarianism in its traditional ovo-lacto form. These different gradations of vegetarianism could be important for more targeted vegan advocacy initiatives.
- Targeted messaging should address generational differences in attachments to meat and dairy.
- Social researchers should explore the full range of theoretical frameworks discussed in this report when investigating topics related to vegan transition. It is particularly important to focus on frameworks which can accommodate large scale, institutional dimensions.

2. Project

This project aimed to deepen understanding of barriers preventing transition to veganism, with a focus on vegan eating practice. A key objective for the research was therefore to gain insights into how non-vegans perceive vegans and messages about veganism. Whilst there are examples of social science research which have worked with vegan participants to explore personal narratives of transition and media and communications research that examines the production and reception of messages about veganism and animal products there is a lack of research into omnivorous and vegetarian eating practices and how these relate to an understanding of vegan practices and representations. Despite heightened visibility and increases in actual practitioners, veganism remains a minority practice in the face of a still highly dominant omnivorous norm.

The research questions that inform this project are:

- How do a sample of omnivores and vegetarians understand and represent veganism?
- How do a sample of omnivores and vegetarians imagine what a vegan transition would entail?
- Which messages are effective in the promotion of veganism to a sample of omnivores and vegetarians

The project is informed by a practice approach to social change and a discursive/affective approach to the reception of messages about veganism. The practice approach, now routine in sustainable transition research, understands a practice as the key element of analysis and as involving three interconnected elements. These elements – meanings, materials and competences – require cohesive integration for a practice to become socially embedded and diffuse. For these elements to cohere practitioners need certain social situations, events and opportunities. This could include, for example, meanings (knowledge and information about what veganism is and is not), access to the right materials (for instance vegan food, ingredients and other products) and competences (for instance, the ability to prepare a vegan meal). In the case of veganism, all these elements together (meanings, materials and competences) increase the social intelligibility of the practice. If only one element is present then veganism may be perceived as difficult or socially unintelligible. Importantly, in practice theory a consideration of how these practice elements interact, and how different practices interact with each other, means that the individual is no longer the primary unit of study. Whilst this sets up tensions with approaches which psychologists tend to label as ‘behaviour change’ which typically focus on attitudes and how to change them, it has the advantage of being better able to consider the social dynamics of change at multiple levels of society, such as institutional barriers and not just micro level determinants of change. Although we believe this to be an illuminating framework we have included in this report a consideration of a broad range of frameworks developed in the social sciences to try to understand practice changes, or ‘behaviour change’. Indeed, this is unavoidable because, as the background section in this report illustrates, the vast majority of pre-existing research

into veg*nism and meat consumption has emerged out of psychological and marketing related disciplines. The next section therefore engages with research that includes a broad range of empirical and conceptual approaches to the topic.

3. Background

Introduction

This review focuses on academic literature that explores the meanings around meat and dairy consumption, how these meanings help to sustain the predominance of such consumption practices, and how they potentially dissuade transition to a vegan lifestyle. The review covers studies that focus on the need to reduce global processes of mass meat production and consumption for the sake of sustainability, public health and food security – a focus on people and the planet, and Critical Animal Studies research which engages with meanings of meat and meat consumption with food-animals at the centre of the discussion. Studies reviewed in this section includes analyses of meat as symbolically, culturally and historically related to gender. Through a focus on animal product consumption practices and the ‘meanings environment’ around them, the review examines perceptions of vegans and veganism and how such perceptions become barriers to veganism. This section summarises scholarly work on the influence of celebrity, message framing and emotional engagement and concludes with a review of theories of behaviour change and transition.

Consumption practices

There is a fast expanding body of research that highlights a need for drastic change in food production and consumption practices globally, particularly in relation to animal food products, for the benefit of environmental and social sustainability, food security, public health and animal welfare (Vinnari and Vinnari, 2014; Schösler et al, 2015; Aiking, 2014; Bakker et. al., 2012; DEFRA, 2008). This work argues that food cultures and consumption practices need to be addressed as the changes required cannot be answered by technological advances alone. In addition, a growing demand for animal products is causing severe environmental pressure and degradation (Vinnari and Vinnari, 2014; Bakker and Dagevos, 2012) and mass-produced animal products raise further concerns about animal welfare. An unwillingness to transition away from meat and dairy consumption has been linked to perceived barriers that include high price of non-meat alternatives, lack of familiarity with meat substitutes, and sensory unattractiveness while, where it is considered in relation to climate change, a lack of knowledge, skills, motivation, time and money have been shown in previous studies to act against dietary change (Mäkinieniemi and Vainio, 2014; Lornzoni et al., 2007; Semenza et al., 2009).

Institutional barriers

In the UK and elsewhere there is evidence of cultural changes and an increase in knowledge around the environmental impacts of producing animal products which correlates with a developing mainstream engagement with veganism (Twine, 2018; Jallinoja et. al., 2016; Schösler et. al., 2015; Sobal, 2005), and increased demand for popular alternatives to animal products (including research into plant-based and cell-cultured meat which negate the need

for animal cruelty in production and use less energy and land to produce) (Donaldson and Carter, 2016). However, 'meat culture' (Potts 2016) remains dominant and a majority of the population remains omnivorous. It is vital to approach this topic from both the perspectives of cultural and societal change to better grasp the social dynamics which might facilitate or impede pathways to change. Sociological phenomena such as social class, ethnicity and gender also shape institutional barriers to change which may be some of the most important in locking in pre-existing food practices. To date there is a lack of research into the role of social institutions in shaping dietary change but schools, universities, hospitals and the workplace generally are important sites of analysis. Probyn-Rapsey et. al. (2016) was one of the first approaches to argue that the University, as an important institution and agent of change, should lead in incorporating an understanding of interspecies justice into its sustainability policies, which would be reflected in its catering provision. Accessibility to certain foods, particularly fresh fruit and vegetables, has been subject to investigation within the literature on food deserts but this does not address the particularities of institutional barriers to veganism specifically, and indeed some academic studies challenge the existence of food deserts in the UK (Cummins and Macintyre, 2002; Burgoine et al., 2017). Webb et al. (2016) on the other hand notes for instance the urgent need for adequate enteral feeding preparations for critically ill vegans in hospitals. Organisations such as The Vegan Society have recognised the importance of institutions in their campaigns on, for example, hospital, school and prison provision for vegans. In such contexts pre-existing relationships between providers and suppliers may lock in traditional food practices.

Eating identity

Identity is highlighted by many studies as significant in relation to dietary choices. Eating identity (EI) studies report that people who self-describe as healthy eaters were more receptive to nutritional messages and have healthy diets with higher intakes of fruits and vegetables whereas high meat-eating eating identities were associated with less healthy dietary intake (Ma et al., 2017). Another view on dietary choices and their relationship to identity argues that 'politicized diets' – alternative diets that include vegan, vegetarian and reduced meat- are claimed as part of an identity and the length of time a dietary practice is undertaken correlates with stronger affirmation of diet as part of identity (Chuck et al., 2016). In broad agreement with this, other studies note that those who limit or exclude meat from their diets are more likely to regard their eating patterns as part of their identity (Haverstock and Forays, 2012). In contrast to the extent to which eating practices that limit or exclude meat are strongly associated with self-identity and dietary groups (vegan and vegetarian for example), conscientious omnivores are reported as being less likely to perceive their dietary practices as relevant to their sense of self (Rothgerber, 2015). A 2018 study found that predictors for lapses from vegetarian and vegan diets include political ideology in addition to personal inconvenience, meat cravings, awkwardness in social settings and health/nutrition concerns. Higher right-wing ideology the study argues predicts not only higher consumption of animals but also significantly greater chances of lapsing

from a veg*n diet back to meat consumption (Hodson & Earle, 2018). Other studies highlight that food choice and self-identity is complex and even where a person self-identifies as vegetarian for example, there is ambiguity around how they categorise 'meat' and distinctions between the labels vegan and vegetarian are reported to be unclear (Rosenfeld and Burrow, 2018). Rosenfeld and Burrow contend that dietary identities are problematic and cannot account for the multiple ways in which individuals may elect to exclude animal products from their diet. They argue that although individuals may not engage with vegetarianism they have a self-perception as animal product excluders (Rosenfeld and Burrow, 2018). Such complexities make it important therefore to examine the cultural meanings ascribed to meat and meat consumption and what barriers are imbued in those meanings which dissuade the rejection of animal product consumption, even when faced with compelling arguments and evidence presenting the need to do so.

'Meat paradox'

In the UK, the context for this study, there exists a cultural expectation that people love and care for animals (a 'nation of animal lovers'), while at the same time the killing and consumption of animals is normalised. This disjuncture can be conceptualised as 'the meat paradox' (Bratanova et. al., 2011; Joy, 2010). This apparent contradiction raises the question, how do individuals who claim to love animals negotiate their simultaneous love of eating animals? Ambivalence and moral disengagement strategies have been identified as coping mechanisms used by omnivores to address these contradictions (Buttlar and Walther, 2018; Povey et al., 2001) and cognitive dissonance theory is well established as an explanation for the meat paradox (Piazza et. al., 2015; Bratanova et. al., 2011; Loughnan et. al., 2010; Festinger, 1957). Macdonald (2010) describes three responses to acquiring knowledge of animal suffering: action (such as giving up animal products), repression, or dealing with the discomfort that knowledge produces. Joy (2010) describes the employment of denial, justification and cognitive distortions to alleviate guilt and about eating animal products. Similarly, Piazza et al. (2015: 114) found that individuals can respond to the meat paradox in two ways: 'one can reject meat consumption, bringing one's behaviors into alignment with one's moral ideals, or one can bring one's beliefs and attitudes in line with one's behavior through various psychological maneuvers'. One such manoeuvre is what Carol Adams (2010) describes as the construction of the 'absent referent', a concept used to explain how it is possible for those who love animals to eat them too. The 'absent referent' at the meal table is, Adams argues, the someone, the animal, whose life has been taken, and suffering endured, to enable the omnivore to consume their meat (Adams, 2010; Twine, 2014). For Adams (2010), to assuage the conscience of the omnivore it is important for this someone to become a 'something', to be known as no more than 'meat'. This is, she proposes, a process of objectification. Using a critical feminist analysis Adams explains that objectification allows those in a dominant position to view other beings as objects and by doing so, negate the guilt of oppression.

One way in which people may overcome the meat paradox is to view the animals that they categorize as 'food animals' as unable to feel pain or to view them as 'unworthy' of moral

consideration (Loughnan et. al., 2010; Bratanova et al, 2011). Research by Loughnan et al. (2010) shows how omnivores draw boundaries of moral concern in a motivated rather than absolute way, making it possible to legitimize animal suffering and meat consumption through the removal of moral status of food-animals. This means that individuals can, while purporting to care about the welfare of some animals, be motivated to 'dementalize' or ignore the subjective lives of other animals, to remove, in their conscience, the beings' mental capacity to suffer: 'if animals lack moral status then killing them is not a moral issue, and eating meat is not morally problematic' (Loughnan et. al., 2010: 157). While a willingness to eat meat can be reduced by moral concern for animals (Bratanova et al., 2011), Loughnan et. al's (2010) study proposes that eating meat can reduce moral concern for animals. Piazzaa et. al. (2015) found that omnivores justified meat-consumption through 'the 4 N's': that meat is 'natural', 'normal', 'necessary' and 'nice'. According to this study, omnivores use the 4 N's to alleviate guilt or discomfort and to shift responsibility from themselves to the 'Ns' (Piazzaa et al., 2015; Joy, 2010).

Vegan stigma

Research has shown that the stigmatization of those who do not eat meat is used by omnivores as further justification for meat consumption (Schösler et. al., 2015; MacInnis and Hodson, 2015; Twine, 2014; Minson and Monin, 2012; Cole and Morgan; 2011; Sobal, 2005; Bresnahan et al, 2016). In a study of vegan stigma Markowski and Roxburgh (2018) found that non-vegans anticipate stigma associated with vegan eating and identified social and behavioural distancing as avoidance strategies. They conclude that non-vegans would find it easier to change eating patterns if support rather than stigma for vegans was present amongst friends and family. In their study of vegan stigma, Bresnahan et al (2016) reported that emotional responses to messages about veganism were more positive in relation to the health aspect and more negative in relation to vegans' moral standards. The study found that guilt and discomfort were the strongest emotions evoked by a provegan message. Sobal (2005) highlights a common comparison made (particularly by men) between 'real food' (meat) versus 'rabbit food' (vegetarian/vegan food) used to ridicule and de-legitimize vegetarianism. Minson and Monin (2012) found that omnivores in their study tended to have negative attitudes towards vegetarians and were more concerned about the possibility of vegetarian moral judgement of their eating habits (threatening their sense of self) than they were about eating meat (concern for animals). Minson and Monin's (2012) project on 'do-gooder derogation' involved two studies which assessed omnivore perceptions of vegetarians as morally judgemental. The studies reflected an anticipated resentment from omnivores towards vegetarians which was triggered by an assumed moral reproach. The research also found that the expectations that omnivores had of vegetarian moral reproach was exaggerated when they compared omnivore expectations and vegetarians' judgements of meat eaters.

The sensitivity that our participants exhibited in our subtle threat manipulation suggests that our placid daily interactions may conceal an undercurrent of

exaggerated threat perceptions and retaliatory derogation, a dynamic which deserves further study.

(Minson and Monin, 2012: 206)

Utilising Sara Ahmed's (2013) conceptualisation of social and cultural expectations and practices which lead the feminist to be deemed a 'killjoy' (using the example of dinner table conflict as a site for the analysis of symbolic and cultural meanings), Twine (2014) illustrates that by resisting dominant social norms vegans can also be seen as 'killjoys'. Vegans essentially disturb social norms and assumptions around the happiness of animal consumption, providing an alternative narrative of food pleasure. By being present at the table, even without verbally expressing so, the 'absent referent' becomes more difficult to sustain. The resulting discomfort can result in complicated, difficult and challenging interactions, emotions and confrontations. Relationships can thus be a particularly difficult aspect of transitioning to a vegan diet due to potentially negative responses from non-vegan friends, family and acquaintances, within the broader context of the role that food plays in constructing everyday social events and daily time schedules. Greenebaum (2012) found that vegans and vegetarians adopt 'face-saving' strategies to avoid conflict with family and friends that include changing a conversation, staying neutral, promoting education and focusing on health benefits. This is further supported by Stephens-Griffin (2017) whose qualitative research on vegan identity found that vegans employ strategies to negotiate the perceived likeliness of hostility and ridicule from others, often including hiding their veganism. Vegans in this biographical study described an often-fraught process of 'coming out' to friends, family and colleagues, suggesting that the fear of social stigma around veganism continues to be significant even after someone has begun adhering to it. Interactions with omnivores about veg*nism can conjure strong (often negative) affective responses. Such responses are complex and contextual and require further study for a deeper understanding (Minson & Monin, 2012; Schösler et. al., 2015; Sobal, 2005). Though as veganism becomes more socially mainstreamed we might expect a general lessening of stigmatisation and difficult social situations.

Gender

The intersections between societal constructions in relation to gender and species have been well documented in the field of Critical Animal Studies (Adams, 2010; Gaard, 1993; Gruen, 1993; Donovan, 1990). Most notably, Adams' (1990; 2003; 2010) 'sexual politics of meat' utilises a feminist analysis which critiques social constructions of humans, other animals, and the relationships between them. Adams (1990; 2003; 2010) provides a framework for investigating connections between speciesism and other oppressions, by illustrating how hierarchies of species and meat protein consumption are interlinked with hierarchies of race, class and sex within patriarchal societies. She argues that feminist analysis logically contains a critique of human/animal relationships. Meat, she proposes, is a symbol of power and status, and thus in a patriarchal society, meat is constructed as masculine (Adams, 2010). According to a study by Beardsworth et al. in 2002 women were

less inclined than men to believe a healthy diet requires meat and they expressed greater concern about animal suffering.

Where it is argued that masculinity and femininity frame food practices, it is proposed that gender directs the consumption of gendered foods (Schösler et al 2015) and gender is partly performed through food practices (Sobal, 2005). A relationship between meat and ‘traditional’ gender roles in Western post-industrial societies has been noted, where men are traditionally seen as the economic provider and primary consumer of meat as symbol of power and position (the man as the meat carver), and women as the purchasers and preparers of food within the social institution of marriage and ‘the family’ (Adams, 2010, Schösler et. al., 2015; Sobal, 2005). Although such associations now have a weaker cultural grip² (Schösler et. al., 2015; Sobal, 2005) they remain culturally significant. For Sobal (2005: 149) ‘A hegemonic masculine, meat-eating model exists in contemporary [Western post-industrial] society’ meaning hegemonic masculinity provides a prototype for masculinity, or an ‘ideal’ through which certain foods are considered masculine and others feminine. Typical ‘masculine’ foods include ‘beef (especially steak), hamburgers, potatoes and beer’ where as ‘feminine’ foods include ‘salads, pasta, yoghurt fruit and chocolate’ (Sobal, 2005:137). Therefore, masculinity can be enacted through food practices by ‘eating like a man’ (such as eating food framed as ‘manly’ in ways which are deemed manly (e.g. rare meat, red meat, BBQ practices, large portions etc.). Masculinity and what men are expected to eat contrasts with the relationship between femininity and food which is often associated with what women *do not* eat (with a focus in targeting foods at women which are low calorie, with a cultural pressure of weight loss and dieting and to ‘eat lightly’) (Sobal, 2005). For Adams (2010) and Sobal (2005) the long-standing relationship between masculinity and meat which links back to cultural mythology around ‘men’ as ‘hunter gathers’ enables men to reassure their own maleness and therefore status, despite changes in gender roles and food practices, through meat eating. Men can thus draw on ‘masculine scripts’³ (Sobal, 2005) for different situations to ‘do gender’ through food practices, or even to excuse convergence from expectations of manliness in relation to meat-eating⁴. The belief that ‘real men eat meat’ along with the abundance of cheap meat may provide significant barriers to veganism (Schösler et. al., 2015).

Another way in which masculinity’s relationship to meat and meat culture is shown is in perceptions of veg*ns and veg*nism as ‘feminine’. Firstly, in the UK there is a consistent vegetarian gender bias; a significantly higher proportion of vegan women than men

² Seeing a growth in non-traditional masculinity as well as a growth in alternate representations of masculinity which reject meat protein, such as vegan athletes, vegan body builders, those who follow a ‘straight edge’ lifestyle (Sobal, 2005; Schösler et. al., 2015)

³ While critiquing common conceptions and practices associated with masculinity it is important to note that masculinity is contextual and contingent and is not invariant (Schlosser et. al. 2010; Sobal, 2005) e.g. ‘doing’ masculinity in some contexts may require the assertion of masculinity through relationship with meat where other contexts may not. The complexity of masculinity and the relationship between ‘maleness’ and ‘meat’ intersect with other aspects of culture and identity.

⁴ Sobal’s (2005) found that men will make excuses to other men if they are ‘caught’ eating a meal which does not contain meat, either by passing the responsibility onto a partner (i.e. my wife made my lunch) or blaming the situation (I can’t eat BBQ food now, I have an important meeting and don’t want to ruin my shirt) to avoid challenge to their masculinity as a result of ‘non-masculine’ eating practices.

(Gaarder, 2011; Ipsos MORI, 2016) (there is also a general bias in terms of age⁵). Research has shown that veg*nism can be equated with femininity, and therefore deemed problematic for men (Adams, 2010; Sobal 2005). For Adams (2010:27) ‘because meat eating is a measure of a virile culture and individual, our society equates veg*nism with emasculation or femininity’. A comparison can thus be drawn between common conceptions of meat-eating as manly, powerful and strong, with veg*nism (or lack of meat-eating) as feminine, weak and therefore less valid or desirable (particularly for men). As noted above, if some men reassure their masculinity through rituals and practices of meat consumption (Adams, 2010), then the proposed removal of such rituals may represent a threat to masculinity.

Food and cultural meanings

For Sobal (2005:136) ‘Foods are objects inscribed with many meanings, representing ethnicity, nationality, region, class, age, sexuality, culture and (perhaps most importantly) gender’. Schösler et al. (2015) carried out research to explore the interconnections between masculinity, meat and ethnicity. The study was based in the Netherlands exploring the relationship between masculinity and meat by measuring differences between young second generation Chinese Dutch, Turkish Dutch and native Dutch adults. The study aimed to understand ethnic differences in men’s relationships to meat to be able to recommend strategies for encouraging a reduction in meat consumption which accounted for cultural difference to address growing concerns around sustainability, food security and public health. They found that the relationship between masculinity and meat crosses many cultural boundaries but the complexities of differences in context must not be overlooked. The strength of cultural and personal relationships between masculinity (and sense of self) and meat therefore may explain a significant barrier to vegan transitions for many men in the UK. They found that the Turkish-Dutch group were more traditional with the largest difference in food habits related to gender and the highest meat-masculinity relationships, followed by the Chinese-Dutch and the native Dutch participants. They concluded that masculinity creates barriers to veganism for men in all participant groups and that men are less likely to consider ‘healthy’ alternatives due to a relationship with ‘femininity’. This implies that the dynamic in play is not merely a meat-masculinity association but also implicates a construction of masculinity where attention to one’s health has traditionally not been socially coded as masculine. Though the relationship between maleness and meat intersect with other aspects of culture, including age, ethnicity, class, sexuality, nationality, region etc, in complex ways, it is clear that the relationship can lead to, or help to explain, barriers to transitions to plant-based diets (Schösler et al., 2015).

In Schösler et. al.’s (2015) study, the cultural differences in diet were significant across genders, shown in the results that Chinese-Dutch participants ate ‘meat substitutes’ (non-meat protein) more regularly as many traditional Chinese meals use tofu, seitan and

⁵ Differences in attitudes to veg*nism relative to age is an area of limited research which this project contributes to.

tempeh. Whereas the Turkish-Dutch participants, though often eating vegetarian meals, generally did not consider meat to be a protein that could be functionally substituted. So cultural dietary differences meant that Chinese-Dutch and Native-Dutch participants were more likely to use meat-replacers. Similarly, Jallinoja et. al. (2016) found that a perception that beans are culturally acceptable in addition to having cooking skills for beans means people are more likely to eat beans as an alternative protein to meat. Also, Schösler et. al. (2015) found product familiarity and cooking skills relevant to willingness to prepare alternative protein sources. From their research results, Schösler et. al. (2015: 158) made suggestions to encourage omnivores to reduce meat-consumption that included giving 'feminine foods' a 'masculine makeover' by 'repositioning them as a means to foster masculine autonomy and self-control', to pay attention to the aspects of food cultures of ethnic groups and nurture and encourage those aspects in relation to sustainability and health, and to highlight cultural foods which contain no meat as advantageous to health. In a study of veg*n men, Mycek (2018) found that men used their dietary practices to uphold masculine status and reported that men masculinized veg*n practices in ways that reinforced gender binaries and norms. DeLessio-Parson (2017) points out that veg*n practices may be more accessible to women but highlights that other studies have found that women experience greater hostility towards their veg*n food practices while men reported supportive or neutral responses (Merriman, 2010; DeLessio-Parson, 2017). In a study of vegetarians in Argentina, DeLessio-Parson reports an oscillation between traditional gendered scripts and a defiance against gendered social expectations. These studies draw attention to the important intersections between gender and food cultures.

The production and framing of media messages

The communication of messages from media outlets, and how individuals respond to such messages, are fundamental to understanding the meat-paradox discussed above. They play a key role in establishing and maintaining the idea that to eat meat is culturally 'normal', or expected, and it perpetuates the idea that a consumer can both love animals and eat them. Molloy argues that mainstream media discourses help to sustain the construction of other animals as objects and are inclined to privilege human need and desire as the focus of relationships with other species (Molloy, 2013). In general, mainstream media tends to represent the interests of those with power and vested interests in maintaining the status quo, or in representing certain agendas (Herman & Chomsky 1994; McChesney, 2004; Curran & Seaton, 2011; Tiffen, 2015). According to this literature, there is a relationship between agenda-focused power groups, press coverage, and how the media overall functions to serve such groups (Almiron, Cole and Freeman, 2018). Decisions about what stories are included in the press, who is asked, and how they are framed are thus political. This point is particularly pertinent when it is considered that, in the UK, just three companies control 71% of national newspaper circulation (Media Reform Coalition, 2015). For Shoemaker and Vos (2009) the gatekeeping of media outlets allows the selective

absence of stories, opinions, narratives and voices, constructing worldviews in their absence⁶.

In relation to animals being presented as food, Almiron, Cole and Freeman (2018: 3) state that 'speciesism or anthroparchy, as much as any other mainstream ideologies, feed the media and at the same time are perpetuated by them.' From a Critical Animal Studies perspective, media representation nurtures a culture of speciesism, motivated by certain political agendas, to secure the continued exploitation of non-human animals for food. Cole and Stewart (2014) illustrate that the cultural construction of human-animal relations takes place in childhood, and they discuss the role such constructions play in facilitating hegemonic animal-exploitation. Their analysis shows the construction of normative relationships and practices in children's media, which allow humans to feel emotionally attached to non-human animals, to love and care for them, while simultaneously consuming their flesh. The work of Almiron, Cole and Freeman (2018) and Molloy (2011), Cole and Stewart (2014) and Plec (2016) illustrate how various elements of the media landscape work together to promote an ideology which normalizes the exploitation of non-human animals. This ideology also incorporates heteronormativity, sexism, racism and classism (see earlier discussions about meat and morality and meat and gender), to maintain a status quo. For example, Plec (2016: 144) describes the interconnectedness and the discomforts in trying to battle the objectification of animals in a similar way to that of women and people of colour in the media: 'To escape the racist (and sexist) wedding of people of color (and women) to animals, we had to lift and distinguish ourselves, leaving the animals—with all their instructive otherness and similarity— firmly pressed below'.

Representations of animals as food, particularly in marketing, advertising and packaging, contribute to the available strategies that alleviate the guilt and discomfort of knowing animals have suffered in the food production process. Molloy (2012: 23) highlights that, 'the discourse of farming and the spaces in which animals are farmed are constructed to appeal to the consumer, both implicitly and explicitly offer reassurance that farmed animals are healthy and emotionally satisfied.' Molloy (2012) reviews butter campaigns to show how advertising images repeatedly show farmed animals as happy, healthy and willing participants in their own exploitation. These campaigns, like others for dairy products generally, use nostalgia and a long-standing cultural association between the British countryside, cattle, and calmness to appeal to the consumer. Advertisements use highly appealing imagery of rolling hills, fresh green grass, happy cows, and open spaces to create associations for the consumer between dairy and naturalness. These narratives of milk and milk products as natural, Molloy argues, negate the lived experiences of dairy cows and the realities of farming practices.

Across media outlets engagement with non-human animals are typically framed within the context of their relation to (and their benefit or hinderance to) humans (Freeman, 2009; Almiron, Cole and Freeman, 2018). Freeman's (2009) textual analysis of farmed animals in American national print and broadcast news found that beyond the advertising of animal products (which, like the butter campaigns analysed by Molloy, carefully avoid the realities

⁶ For example, Rupert Murdoch is known as a 'climate change skeptic' (Tiffen, 2015) for dismissing the risks associated with climate change issues

of intensive farming), American media supports the cultural production of a speciesist media landscape through reporter bias, commodification and objectification of animals. Such campaigns fail to acknowledge farmed animals' lived experiences and emotions and disregard other animals as valuable individuals. Freeman highlights the use of whimsy to trivialise the death of farmed animals and the removal of emotion from descriptions of animals lives and deaths. According to Almiron, Cole and Freeman:

Research on the representation of other animals in films, news, advertising and literature has shown the systematic othering, manipulating and silencing of the reality of nonhuman animals and the arbitrariness of their framing – almost always built within frames of power relationship where they are treated as symbols, pets, pests, prey, food, danger, machines, etc. according to human convenience (2018: 5).

The ways in which non-human animals are framed illustrate and help to sustain relations which keep human needs and desires at the centre of human-animal relationships (Almiron, Cole and Freeman, 2018).

Animals as objects and subjects

The types of news story which are picked up by the press, and how they are framed, in relation to human and non-human animal relations has been the topic of several research projects. In discussing her concept of 'carnism' Melanie Joy (2010) described the phenomena of 'saved from slaughter narratives' in the media and the role they play in supporting cognitive dissonance. By 'saved from slaughter narratives', Joy refers to stories which describe animals that have survived the meat industry, escaping or being saved from slaughter, while ignoring the billions of animals who do not evade slaughter. She explains that these stories help to create the distance felt between animals as sentient beings and animals as meat⁷. Molloy (2011) also analyses media reports of farmed animals who escape on their way to slaughter and argues that these 'soft' news stories rely on narrative framing strategies to ensure their entertainment value obscures any ethical questions about animals' moral value. Freeman (2009) asserts that animals tend to be most newsworthy when they pose some sort of health or economic risk to humans, and in focussing on the threat to humans, the animal as an individual is lost. Lockwood (2016) supports this assertion using the example of a media flurry that occurred in 2015 around a World Health Organisation classification of processed and cured meats as a 'Class 1 known carcinogen'. Lockwood carried out an analysis of the reporting of the story and found that none of the ten newspapers analysed recognised animal lives as part of the conversation. Despite the wealth of experts supporting the decision and the evidence provided, and there was no media engagement with animal advocacy and very little with sustainability as a concern when discussing the prevalence of meat production (Lockwood, 2016). In an analysis of the UK post-war domestic egg market, Molloy examines the government strategies that supported the intensification of poultry-keeping. She notes that eggs became connected to

⁷ Key examples that Joy (2010) provides are: the following of the 'Tamworth Two', two pigs who evaded slaughter (The Daily Mail paid to secure their lives and for the rights to their story), the annual Presidential Thanksgiving Turkey pardon in the USA as well as other popular culture narratives in films such as *Charlotte's Web* (1952) and *Babe* (1995).

national identity and taste culture while the suffering of chickens and hens was obscured by the language of production and scientific management of farmed animals. This removal of animal lives at the centre of the topic of meat serves to naturalise a view that farmed animals exist for food and again do not have value as individuals. Constructing animals as objects helps to support cognitive dissonance and maintains an anthropocentric worldview where exploitation of animals remains acceptable and necessary.

In contrast to the view of animals as objects, a study by Niemyjska et al (2018) reports that recognition of humanlike characteristics in other animals (anthropomorphism) is associated with an individual predisposition to abstain from meat consumption and increased empathy to animals. From analysis of a range of different media and public reception of messages about animals Parkinson (2019) also argues that forms of anthropomorphism in visual communication strategies have been successfully deployed to engage human empathy for other species and other studies have found associations between anthropomorphism and pro-environmental behaviours and higher environmental concern (Tam, 2015; Kaiser and Byrka, 2015). Mainstream films such as *Babe* (1996), *Chicken Run* (2000) and *Okja* (2017) depict anthropomorphic animals and have been regarded in critical and popular reception as communicating pro-veg*n messages. Responses have been mixed where the films are reported to act as catalysts for pro-veg*n behaviour change. Where the reception has been broadly positive the films tend to be praised for handling the message in a sensitive and acceptable way and where the reception is negative the narratives are criticised for using anthropomorphic film characters to promote an ideological agenda (Molloy, 2011; Parkinson 2019). Addressing the place of media content in relation to veg*n transition Hodson and Earle (2018) propose that media which expressly deals with the impacts of meat consumption on animals and the environment may help those already considering veg*nism to achieve a veg*n diet as a personal goal (2017:79).

Media representations of veganism

As discussed earlier in this literature review, there remain cultural and social stigmas around being vegan. Such stigma is maintained through social interactions (derogation and ridicule of vegetarians and vegans) and through cultural representations. Cole and Morgan (2011) investigated the perceptions and ridicule of veganism in mainstream culture through content analysis of British newspapers. Their analysis showed that only six percent of newspapers portrayed veganism with a 'positive' perspective. When this analysis was conducted in 2007 the derogatory portrayals of veganism were evident and included descriptions of veganism as 'difficult', 'obsessive', or even 'dangerous' to health and vegans as 'faddists' and in some cases 'hostile extremists'. Using the term 'vegaphobia', Cole and Morgan (2011) evidence the part that such media representations work to nurture speciesism by deliberately removing veganism from animal rights, welfare and liberation and positioning it as a minority practice to be ridiculed and dismissed. Findings from Mastermann-Smith et al.'s (2014) content analysis of vegan representations in Australian newspapers, which took place from 2007 to 2012, were consistent with the findings of Cole and Morgan (2011). Over the five-year period covered, the research showed newspaper representations were predominantly negative and again tended to remove the ethical concern for animals as the fundamental motivation for veganism. A study of vegan stigma

published in 2016 noted that online antivegan sites had titles that included *Vegans Are Evil, Let Them Eat Meat* and *Antivegan Society of Meat Eaters* (Bresnahan et al, 2016).

According to Almiron, Cole and Freeman (2018), media representations tend to trivialise veganism as a 'consumer lifestyle' and remove the critique of non-human animal exploitation. Such media representations marginalize vegans through the spreading of misinformation and manipulation of vegan experience as well as reproducing exploitative speciesist relationships through deliberately obscuring the reality of motivations for, and information around, veganism (Almiron, 2016; Cole and Morgan, 2011; Cole, 2016; Mastermann-Smith et al; 2014). In an analysis of celebrity vegans, Doyle notes a shift in representations of vegan food since 2013 and a rise in the number of high-profile celebrity vegans that potentially reframes the stigma of veganism as positive and accessible (Doyle, 2016). Acting as cultural intermediaries, celebrities have different roles and functions in relation to veganism; imparting knowledge, having a campaigning role and embodying vegan consumption habits. Doyle found that ethical veganism is often downplayed by celebrity culture to make it more marketable as a consumable set of lifestyle practices. Thus, despite increased visibility within celebrity culture, ethical commitments to veganism are de-emphasised in favour of more palatable mainstream associations with health and lifestyle (it is important to note however that Doyle's study analysed only female vegan celebrities and a recent trend for male celebrities to identify as vegan or plant-based requires further study).

Although older studies have indicated strongly that a generally negative view of vegan practice and pro-meat messaging exists in mainstream media, a study of the discourse on meat and health in *The Daily Mail* over a fifteen-year period, found that messages were inconsistent and contradictory (Leroy et al., 2018). Thirty-five per cent of items depicted meat as 'health-promoting' whereas fifty-two per cent reported 'connections to disease' (2018: 347). While the study found that meat was linked to virality, strength, fertility and masculinity, the authors of the study also note that sensationalism around the negative portrayal of meat associated it with early death, depression and fatigue and harm to sexual health. Nutritional advice was contradictory and the study found that there were competing agendas in evidence which included 'vegan or vegetarian ideology' and the economic interests of the meat industry. The study concludes that 'meat has been represented in mass media as a flexible concept' and that current social and cultural conditions amplify the various associations to the extent that there is no singular dominant narrative. Instead multiple voices contribute to the discourse on meat that include 'scientific experts, industrial spokesmen, celebrities, opinion makers, food writers, health gurus, and ordinary members of the public' (353). This suggests that the dominance of pro-meat messaging is not as robust as previously thought and that opportunities for pro-vegan messages within mainstream media exist.

According to Beverland's (2014) marcomarketing study 'health vegetarians' are an ideal leverage point to mainstream plant-based diets as self-interest increases the likelihood of meat reduction practices, it constitutes the largest segment of plant-based food consumers

and health and fitness concerns are already viewed positively by omnivores. Beverland proposes that where marketers seek to influence dietary change, labels such as vegan or vegetarian should be dropped and non-meat alternatives positioned as an “adventurous diet” ‘or as pathways to more cereal and legume-based meals’ (Beverland, 2014: 379). In terms of cultural influencers and role models, Beverland suggests that high profile chefs, sports stars or ‘those engaged in physically demanding roles’ can be used to overcome some of the barriers that products alone cannot cover. However, Hodson and Earle (2018) also add a note of caution around influential figures and messages aimed at those who identify with a conservative ideology. From their study on conservatism as a predictor of lapses in veg*anism, they point out that different strategies are needed to address right wing and liberal audiences. More research they suggest is needed to understand how messages about lowering meat consumption ‘can originate from prominent figures on the right while being consistent with recipients’ diet goal and concerns for justice more generally’ (2018: 79). Beverland also argues that further research into message framing is critical to understanding the success of different cues and forms of framing. In this regard, studies on message framing and the impact of social media on the mainstreaming of veganism are currently lacking, however there are assumptions that social media platforms play a significant role. For instance, Rogerson (2017) proposes that social media and high-profile vegan athletes have contributed to greater visibility of veganism, and recent media reporting also suggests that social media is central to the mainstreaming of veganism (Jones, 2018). Although there is a large body of literature on social media in relation to, for example, influencers and health and body image, specific research on social media and veganism is needed to understand better the impact of social media platforms and social media influencers on the mainstream visibility of vegans and the communication and framing of messages about veganism.

Message framing and emotional engagement

There remains some disagreement over the extent to which shock tactics or moral shocks are effective in advocacy campaigns and social movements. There is a large body of literature on these strategies in relation to health and particularly around smoking. The literature on moral shocks, animal advocacy and veganism is less well developed, however there remains in this literature differing evidence around the efficacy of such tactics. The use of moral shocks that cause outrage were highlighted by Jasper and Poulson (1995) as a means by which the animal rights movement could increase recruitment. DeCoux’s (2009) examination of abolitionist tactics argued that they were ineffective due to a focus on rational argument instead of graphic imagery and narratives. The 2005 film *Earthlings*, known in online vegan communities as ‘the vegan-maker’ uses what Middleton describes as a ‘compendium of brutally indexical footage of cruelty to animals’ (2015: 287). Middleton notes that the ‘spreadability’ (circulation and distribution across media platforms) of *Earthlings* relied in part on the production and circulation of ‘reaction videos’⁸ and proposes that sharing such content ‘may facilitate the conversion of traumatized spectatorship to

⁸ A video of an audiences’ or individual’s reaction to the content being viewed.

personal collective commitment' (289). In their study of vegan animal rights activists, Hansson and Jacobsson (2014) found that 'micro-shocks' and 're-shocking' experiences from film and other media were mechanisms used to maintain commitment to activism.

People for the Ethical Treatment of Animals (PETA) is considered in the literature to use controversial campaigns to promote animal rights. According to Brummette et al (2013) PETA hopes to cause outrage with their campaigns to encourage discussion and ultimately gain support for animal rights and welfare by maintaining notoriety. Brummette et al (2013) discuss PETA's tactics, emphasising their continued presence in the media with each campaign, the maintaining of animal advocacy debates within media discourses, the endorsement of celebrities and its status as the biggest animal rights group with the largest funding in the USA. It is not, however, clear from the research which campaigns and tactics are the most successful in changing attitudes and behaviour. Scudder and Mills (2009), in a study assessing the responses of 53 university students to a graphic animal rights campaign (launched by PETA against alleged abuses on a corporate farm) found that the shock tactics employed were effective in harming the credibility of the animal food processing industry. However, they found that it was the strength of the message of 'wrongdoing' which seemed to be most effective in damaging credibility, rather than the intensity of the graphic imagery that was presented. In *The Pornography of Meat*, Adams (2015) asserts that PETA thrive on negative attention, that their messages are damaging and help to support hegemonic gender inequality and oppression, which seems to be in direct opposition to a vegan project of dismantling inequality and promoting respect and compassion. Adams questions whether animal advocacy messages can be deemed effective if they promote harmful messages (for example, normalising violence against women).

The growing presence of veganism in mainstream media, and the diversifying of media representations of human-animal relationships and veganism raises questions about which tactics are the most effective in encouraging a move towards a plant-based diet and vegan lifestyle. Lockwood (2016) asserts that research on the effectiveness of environmental and animal advocacy campaigns in garnering support from the public has illustrated the intensity and passionate responses on either side of the debates, particularly emphasising climate change as a topic which results in strong emotional responses. Such research has sought to understand how emotional responses to environmental campaigns help or hinder the aims of the campaign in seeking public support (Lockwood, 2016). However, more research is needed to better understand 'the workings of affect as they impact upon motivated reasoning behind people's actions... as well as comprehension of how people react when their identities are threatened' (Lockwood, 2016, p745). Hansson and Jacobsson (2014) assert that affective responses can be cultivated to reinforce activist commitments. Authors note however that veganism and animal advocacy is a particularly turbulent site for affective responses and negotiations. Lockwood (2016), from a Critical Animal Studies perspective, explains that affective responses to media discourses are significant in understanding how individuals process and respond to information as affective responses to media representations shape how individuals engage with the information presented.

Understanding affect is necessary as we do not just see media, we feel it (Sobchack, 2004). Sobchack (2004) describes how some films stimulate senses and illicit an emotional, corporeal and even visceral response (Soback, 2004; Parkinson, 2018). Parkinson (2018), drawing from Soback (2004) and Aaltola (2018), illustrates how an emotional connection to film can nurture empathy for non-human animals and help the viewer to engage with the non-human individual as a valuable, sentient beings, even those we have not had direct physical contact with. For Parkinson (2018: 4) ‘simulative empathy invited by a film narrative can be informed by previous embodied encounters with other animals’. However, there is a notable concern that such empathy, motivated by affective responses, may be temporary and may end when the narrative ends (Aaltola, 2018; Parkinson 2018). Also, in the same way engagement with film (and media messages) is informed by previous embodied experiences with non-human animals, such engagement is also informed by the culture in which we exist (Aaltola, 2018; Parkinson 2018). How individuals relate to characters in film, what they take away from non-human animal narratives, as well as immediate affective responses are informed by our ‘acculturated sensorium’ (Marks, 2002; Sobchack, 2004; Parkinson, 2018). In a study that examines the relationship between affective responses and online campaigning Mummery and Rodan, in their study of Animals Australia emotional campaigning, propose that online tools allow organisations to facilitate affective responses and commitments and that images have the capacity to ‘set off a chain reaction of mass emotion’ which can ‘develop and sustain a networked caring public’ (2017: 46-47).

Theories of behaviour change and transition

This section of the literature review will outline social science theories on ‘behaviour change’ and transition. There exist a wide range of theories from psychology, sociology, science and technology studies and marketing which have been applied to understanding the process of change. Only some of these have, to date, been applied to thinking about vegan transition. These theories tend to operate at different social scales, some with an individualistic focus, other more societal, and others still, trying to transcend this dichotomy. By including an outline of the most prominent theories in this report readers will gain an appreciation of potential frameworks which could be applied in future research. We also point to examples of research where the framework has been used to think about veganism, or in the case of where this is yet to happen, we briefly highlight how the framework could be of use. Although previous work by one of the authors of this report has employed a practice theory approach to vegan transition (e.g. Twine 2017), the focus in this project is on how non-vegans socially construct veganism. This enables the data to be potentially used across the wide variety of theories of change. For example, in the case of practice theory which is partly focused on the meanings of a given social practice (in this case, vegan eating practices), the mixed methods approach is intended to generate rich data directly exposing the various meanings that groups of non-vegans associate with veganism and vegans. However, this interest of practice theory in meanings is shared by most frameworks and it is not the intention in the context of this report to close down the range of potential frameworks that could be employed in this area. The main qualification to this

statement is that, as social scientists, we are not satisfied with approaches which are essentially individualistic and ignore the role of social institutions, cultural norms, historical and technological changes in understanding why and how practices and people change.

In reviewing the literature, we have identified the following twelve explanatory frameworks: i) practice theory, ii) nudge theory, iii) positive deviance, iv) the multi-level perspective on transition, v) social network theory, vi) innovation diffusion/early adopter theory, vii) the social norm approach, viii) social contagion theory, ix) technological innovation system, x) the behaviour change wheel, xi) the transtheoretical model of behaviour change, and xii) the theory of planned behaviour. Although Bakker and Dagevos (2012: 892) are right to state that 'consumers are not captive victims of economic forces' it remains vitally important to understand the many powerful and often ingrained social, cultural, political and economic influences upon consumption practices, many of which are highlighted earlier in the report. Whilst future research should investigate veganism in relation to these frameworks and others, our position is to advocate for *sociological* frameworks which are inclusive of such broader contexts. It is also important to recognise that different frameworks may not be compatible with each other due to their different theoretical assumptions (see Shove 2011) around how change takes place, where it takes place (e.g. in the individual's mind or in social practice) and what shapes the intransigence of particular (in our case) ways of eating.

i) Practice Theory

Practice theory is a sociological approach, now routine in sustainable transition research. It differs from psychological 'behaviour change' style approaches because instead of focusing on individuals, it understands a practice as the key element of analysis (Shove et. al. 2012). For Hargreaves (2011: 79) 'social practice theory de-centres individuals from analyses, and turns attention instead towards the social and collective organization of practices' to allow the impact of cultural practices on perceptions, interpretations and actions. Practices can be seen to comprise three key elements: competence (skills and knowledge), materials (objects, infrastructure, technologies) and meanings (ideas, norms, symbolism) (Shove et. al., 2012). These elements require cohesive integration for a practice to become socially embedded, to attract people to them. For these elements to cohere, practitioners need to create facilitative social situations and events and to work on features of each of the elements.

Shove et. al. (2012) argue that 'practices emerge, persist, shift and disappear when connections between elements of these three types are made, sustained or broken' (14-5). They also argue that connections form between practices themselves, forming what they term 'bundles'; an example might be driving and shopping. When such bundles become integrated parts of routine social infrastructure they form what are referred to as deeply embedded practice 'complexes' (17). To underline, elements are 'qualities of a practice in which the single individual participates, not qualities of the individual' (Reckwitz 2002: 250) which has an implication for how the framework imagines both change and intervention.

This is not to say that the approach wholly ignores individual actors. People (rarely acting alone) still play an important role in working on these three elements of a practice which means there is scope for practices to subtly, or even rapidly, change over time. Advocates of this approach are highly suspicious that individuals act rationally in a consistent sense. What we practice in our everyday lives is contingent upon normative routinised action and is embedded in the messiness of complex social, emotional relationships. The approach advocates for intervention on the given practice and its elements, rather than on the 'attitudes of individuals', which can be seen, in a more sociological sense, as the internalisation of socially shared meanings.

One of the authors of this report has applied the practice theory framework in order to understand vegan transition (Twine 2014, 2017, 2018). It has proved fruitful for understanding many aspects of contemporary veganism, and has underlined the importance, when considering sustainable food transitions, of the social relationship dimensions of transition. This is all the more important for veganism as it contests dominant social norms and thus in a symbolic sense can be seen as a potentially disruptive transition. A further advantage of practice theory is that it places an emphasis on material objects as constituting part of our social world and as playing an important role in transitions. When theorising food transitions it is important to examine the materiality of food (be that the food itself, or objects and infrastructure which constitutes part of the practice). For example, Twine (2018) was able to underline how the creativity of the vegan community of practice has been instrumental in reinventing vegan eating as a practice associated with pleasure, in contrast to prior dominant meanings of dullness and austerity. There remains considerable further scope for more research using this framework in relation to veganism and the present study is valuable for providing a better appreciation of the meanings of veganism, from various non-vegan perspectives.

ii) Nudge Theory

Nudge theory investigates choices, how they are made and how people can be encouraged to make different ones (Thaler et.al., 2009). Nudge theory suggests that small changes in everyday decision-making process can be made through positive reinforcements and subtle suggestion without restricting choices (Thaler et.al., 2009). 'The way a choice is presented influences what a decision-maker chooses' (Johnson et. al. 2012: 487). Using this knowledge, it is possible to develop tools for structuring the choices individuals make. This approach is unique for the degree of influence it has had upon the UK government. Although now independent of government, the behavioural insights team, also known as the 'nudge unit' was formerly part of the government illustrating how influential it had become. We know of no applications of nudge theory to veganism in the research literature. However, it is possible to argue that it is used in how supermarkets organise their space. For example, the decision in 2018 of Sainsburys plc to include meat replacement products (vegan mince and burgers) amongst their meat products in the meat aisle could be seen as an example of trying to nudge consumer behaviour in more pro-environmental directions.

iii) Positive Deviance

The approach of positive deviance has emerged from health-related research. As Marsh et. al. (2004) explain, 'Identifying individuals with better outcomes than their peers (positive deviance) and enabling communities to adopt the behaviours that explain the improved outcome are powerful methods of producing change' (1177). They further outline that 'Positive deviant behaviour is an uncommon practice that confers advantage to the people who practise it compared with the rest of the community' (ibid.). Developed initially in the 1970s the approach has subsequently been used, for example, in the area of children's nutritional health, rates of contraception, safe sexual practices, and educational outcomes. It is also a community-based approach which stresses the importance of community engagement and the exploration of community-based norms. The application of positive deviance to veganism is as yet unrealised but there are obvious ways in which the practice could be classified as a positive form of deviance. A healthily or sustainably constructed veganism could be operationalised in the context of ecological public health programmes. More contentiously for the broader society veganism could be seen as positive deviance in terms of a more ethical relation toward other animals, and nature generally. The practice encapsulates the norm transgressing features of other forms of positive deviance, valuing a minority community practice which could have substantial benefits for all. Boyle (2011) has applied the approach to vegetarianism but at the time of writing that remains the only research which has come close to thinking about veganism through a positive deviance lens.

iv) The multi-level perspectives on transition

The multi-level perspective (MLP) is associated with science and technology studies and, like practice theory, has been used to examine sustainable transitions at multiple scales. Most clearly associated with the work of Frank Geels, the perspective argues that innovation and transition emerge from within the interdependency between three different levels of analysis. As Geels outlines,

"The MLP views transitions as non-linear processes that result from the interplay of developments at three analytical levels: niches (the locus for radical innovations), sociotechnical regimes (the locus of established practices and associated rules that stabilize existing systems) and an exogenous socio-technical landscape...Each 'level' refers to heterogeneous configurations of elements; higher 'levels' are more stable than lower 'levels' in terms of number of actors and degrees of alignment between the elements" (2011: 6).

This is an attempt to integrate the micro, meso and macro levels into an overall understanding of societal change. Another point of commonality between the MLP and practice theory is that both approaches often engage in in-depth historical analysis in order to understand how previous (in the language of this framework) 'socio-technical regimes' have transitioned qualitatively to something new. It is not difficult to see how the concept

of niches could be applied to vegan innovation and to imagine a study which analyses the extent to which a vegan niche has been successful in influencing the socio-technical regime, and to what extent the macro landscape is facilitating or curtailing this transition. For example, it could be argued that a vegan regime is in the process of being established, although this presents considerable methodological and conceptual issues since there is some much material overlap between 'different' food regimes. Nevertheless, through developments such as food labelling and social visibility, vegan eating practice is becoming increasingly stabilised (within UK society). Macro influences from the landscape such as amplified discourse on the issue of climate change creates further opportunities for the vegan niche to spread.

In common with many of these approaches outlined there is no research to date on an MLP analysis of veganism, though Vinnari & Vinnari (2014) present a general and original transition management analysis of plant-based diets.

v) Social network theory

Social network theory, or social network analysis is a considerable area of analysis in the social sciences which studies our social networks and relationships in order to better understand a social structure, or a social practice. Although it has a long history the social media connectivity of contemporary society affords new opportunities to better understand networks and their modes of influence. The areas of social analysis which this approach has been applied to are extensive. Notable for the context of this literature review, however, are applications of the approach to social studies of health. The approach has clear links to other social science concepts such as social contagion theory (discussed separately below) and social capital (the analysis of how one's social networks might confer social class disadvantage or advantage). Research has suggested that health-related conditions such as obesity (Christakis & Fowler 2007) or smoking may spread via social networks. One of the most important findings from this area is to suggest that individual health is socially interdependent, and that people are influenced in their health-related practices by those closely networked or related to them.

Whilst we have been unable to locate any research that uses social network analysis to understand vegan transition it would clearly be a useful approach. From both prior interview data with vegans (e.g. Twine 2017) and that produced by this present study with non-vegans it is clear that not only are people influenced to become vegan by vegan friends, partners and family but that non-vegan constructs of veganism and their practices (meat and dairy reduction for example) are shaped and influenced when partners, sons, daughters, parents, in-laws become vegetarian or vegan. A further way in which this approach could be applied to understanding the normalisation of veganism would be to study the networks of vegan advocacy and to compare them with prior successfully normalised practices.

vi) Innovation diffusion/early adopter theory

A framework which tries to grasp how new products or practices spread, innovation diffusion or early adopter theory has been applied to veganism (Riverola et. al. 2017). As they state, 'The 'diffusion of innovations' theory categorizes the factors that drive the dissemination of innovations in the marketplace. The framework additionally distinguishes different adopter profiles that participate in the diffusion process, where 'innovators' and 'early adopters' are the first to adopt the innovation and are thus crucial for the innovation's further dissemination' (2017: 2). Although veganism has grown markedly in recent years, there have obviously been vegans in the UK for many decades. It began to grow more in the 1990s and the first decade of the 21st century. In contrast to the recent growth and social visibility of veganism, people who adopted veganism, for example, pre-2010, could be considered early adopters. The time slice is somewhat arbitrary (the vegan society itself was founded in 1944), but opens up potential comparative research between those who went vegan in specific decades. Research could focus on whether the salient meanings of veganism have shifted between decades. If early adopters practice veganism in such a way, it could for example, slow social diffusion of the practice. As Riverola et. al. put it, '...in some cases, innovators and early adopters act as opinion leaders in their respective communities and hence share the innovation and stimulate others to adopt it. Conversely, innovators and early adopters can differentiate themselves from the population, and in their deviance scare away potential groups of customers' (2017: 2). Citing research by Centola (2011), they also argue for the importance of 'homophily', or the tendency of social contacts to be similar to one another, as important to diffusion and adoption (4). Riverola et. al. (2017) make several insightful propositions which merit further research and are of relevance to this project. For example, they propose that 'the perception of the characteristics of the innovation, as well as the image of innovators and early adopters, included in the communication message moderates the relationship between the receiver and the effect of adoption' (8). This clearly speaks to the interest in this project of how non-vegans socially construct veganism and vegans. In the case of veganism, they suggest, 'omnivores perceive positively the vegan message, but they don't adopt it. Do omnivores believe that by adopting vegan behaviour they are belonging to a new group? Current research shows that omnivores perceived that adopting veganism implies a sense of belongingness to a different group. This negative sense of belongingness scares them away from adopting veganism' (10). This could be one explanation for non-adoption, although not the only one. For example, from a social practice theory perspective, forms of competency and materiality, or their lack thereof, are also highly relevant. Nevertheless, this chimes with some of our later results, as we shall see, illustrating overall positive meanings which our samples of non-vegans associate with veganism.

vii) Social norm approach

The social norm approach has developed out of psychological research around conformity (Burchell et. al. 2013) and consists of the idea that if you tell people what lots of other people do, they are more likely to conform to that way of being, or buying. This technique is

then used directly in social marketing campaigns, and more recently in attempts to change behaviour, notable in health-related campaigns. As Burchell et. al. point out, 'In most sociological accounts, norms are explicit or implicit rules that guide, regulate, proscribe and prescribe social behaviour in particular contexts. Thus, in sociology, norms refer to normative social influence with connotations of 'ought' or 'should'. In social psychology, social norms also refer to patterns of group behaviour' (2017: 2). Similarly, Bicchieri defines a descriptive norm as 'a pattern of behaviour such that individuals prefer to conform to it on condition that they believe that most people in their reference network conform to it' (2017: 19). This is an approach which has not, to our knowledge, been used to frame research into veganism. However much academic research on veganism touches on social norms at least in a general, if not specific, manner. From one perspective, given that veganism is a minority practice, it is perhaps not surprising that this approach has not been used. However, arguably when pro-vegan campaigns make appeals to shared social norms, those which many people would, on the face of it, seem to conform to, they are essentially using a similar approach without specifically naming it. Examples would include evoking social norms against direct violence to animals. Other techniques would be to call on quantitative data suggesting that large numbers of people are now reducing their meat and dairy consumption, in an effort to influence others, and to nudge them along a potential pathway to veganism.

viii) Social contagion theory

Social contagion theory certainly overlaps with several of the aforementioned approaches since it also pertains to social norms and networks. It is further relevant to the theory of positive deviance. It is essentially the idea that practices, emotions, viewpoints are socially contagious. Moreover, the likelihood of you enrolling in a practice (to use the language of social practice theory) is increased, according to this theory, by the number of said individuals in your social network. This makes it a little more precise than the aforementioned social network analysis, but with clear overlap to that approach. Thus, for example, Hill et. al. (2010) found that 'the current rate of becoming obese is 2 per year and increases by 0.5 percentage points for each obese social contact' in their particular study. Following on from this we could potentially predict a similar effect in social networks where people are exposed to a relatively high number of vegans and their practices within their social group.

As the interview data for this project will show later, veganism is 'contagious' to an extent in nudging the eating habits of parents (when they have vegan children and children-in-law), and more anecdotally, vegans often speak of others they have 'converted' or a social domino effect, either with partners, or friends. Again, social contagion theory has not been explicitly used as framework to study pathways to veganism but is mentioned in passing occasionally. For example, Gruen & Jones (2015) state, 'Many who work toward veganism influence others to do so, and they in turn can influence others, and so on. This kind of role modelling may be understood as a species of the broader phenomenon of social contagion in which an action of a particular type makes another action of that type more likely' (167-

8). In terms of micro-scale analyses of veganism this approach alongside social network analysis, can be fruitful for potential research to look at the specifics of 'contagion', to ask, for example, whether some vegan actors, or ways of doing veganism, are more 'contagious' than others, and what shapes this.

ix) Technological innovation system

Technological innovation system is another transition framework capable of analysing socio-technological and economic change at multiple scales. A Technological Innovation System (TIS) is defined as a dynamic network of agents interacting in a specific economic/industrial area under a particular institutional infrastructure and involved in the generation, diffusion and utilisation of a technology (Carlsson and Stankiewicz 1991). El Bilali outlines that, 'in the TIS approach, the development of a new technology results from the positive fulfilment of seven functions: entrepreneurial activities, knowledge development, knowledge diffusion, search guidance, market formation, resource mobilisation, and advocacy and legitimacy creation' (2018). Analyses of veganism at this larger scale using transition frameworks remains absent in the research literature. Yet, their applicability to examining novel vegan foods and their socio-economic embedding and cultural normalisation does seem apparent.

x) The behaviour change wheel

The behaviour change wheel (BCW) framework is used by Grassian (2019) to analyse the effectiveness of different campaigns aimed at both meat and dairy reducers, vegetarians and vegans. Rooted in psychology and social psychology the BCW framework posits behaviour as the result of the interplay of capability, opportunity and motivation, a so-called COM-B model (Atkins and Michie 2013). Capability is divided into physical and psychological, opportunity into physical and social, and motivation into reflective and automatic. This affords the framework the ability to account for social norms and the social environment to an extent. The wheel also has a layer named 'policy categories' which includes considerations of more macro phenomena such as legislation, regulation and fiscal measures. It thus constitutes a novel framework in that its psychological roots are extended in an attempt to account for larger scales of the social and economic. It is specifically aimed at having a multi-phenomena relevance and is designed as an intervention tool for use with, but not restricted to, behaviour change in eating habits. For example, Grassian (2019) uses the framework to categorise potential barriers to meat/dairy reduction.

xi) The transtheoretical model of behaviour change

The transtheoretical model (TM) is a widely used framework in the area of behaviour change and is another approach which has been used in relation to veganism. The approach emerged from work in psychotherapy during the 1980s (Prochaska & DiClemente 1982). It was specifically designed in relation to health-related behavioural change, such as being

used to assist people to stop smoking. The main characteristic of the approach is to outline behavioural change as a series of changes between different stages. Mendes (2013), who has briefly applied the framework to the process of becoming vegan, outlines the stages as follows, 'The TM construes change as a five-stage process. The five stages of change are (a) precontemplation, (b) contemplation, (c) preparation, (d) action, and (e) maintenance' (142). Although not based on empirical research, Mendes (2013) considers how each of these stages may be applicable to the process of becoming vegan. In contrast to several of the approaches already described, the TM is clearly a framework focused on the individual and may thus be limited. However, it is still useful to consider the TM and to compare vegan transition with other processes of transition to health-related practices.

xii) The theory of planned behaviour

The theory of planned behaviour is a further model of behaviour change. The theory is focused on the belief that behaviour is shaped by individual intention, and that intention arises as a result of the interplay of attitude, subjective norms (judgements of how others behave) and behavioural control (perceptions about one's ability to perform the behaviour). It could be criticised for an overly rational view of the individual and a downplaying of both the social and emotional context of action. It's narrow focus, like the TM, contrasts it with many of the aforementioned frameworks. Although it is a widely used approach in psychology and has been used extensively in the study of eating behaviour there are not many applications with regard to veganism. One exception is a study by Povey et. al. (2001), entitled 'Attitudes towards following meat, vegetarian and vegan diets: an examination of the role of ambivalence', in which they found that 'In general, predictions were supported, in that respondents displayed most positive attitudes and beliefs towards their own diets, and most negative attitudes and beliefs towards the diet most different from their own. Regression analyses showed that, as predicted by the Theory of Planned Behaviour, attitudes, subjective norm and perceived behavioural control were significant predictors of intention to follow each diet (apart from the vegetarian diet, where subjective norm was nonsignificant). In each case, attitudinal ambivalence was found to moderate the attitude-intention relationship, such that attitudes were found to be stronger predictors at lower levels of ambivalence' (15). The data we present in this study shows something different to this. Although we do not use this framework or terminology, the meanings of veganism in our study are generally positively received, with some qualifications, by a large proportion of our non-vegan sample.

This part of the literature review has surveyed a broad range of theories of change. They include a diverse set of disciplinary sources and have different sets of emphases and theoretical assumptions. Some are rather narrow, and others intend to work across different scales. Whilst this set of approaches is not intended to be comprehensive it includes major well-known frameworks. We hope that it is a summary which will be useful for future researchers. As researchers with our own influences our sympathies lie mostly

with approaches that are anti-individualistic, account for the role of the emotions, extend broadly to cover an open account of the social shaping of eating practice (such as considering the role of gender, religion, ethnicity, age and social class), and are able to account for multiple scales (micro, meso and macro) and histories when attempting to understand the why and how of contemporary eating practice.

Conclusion

There is a clearly discernible increase in academic interest in veganism over the last 10 years which is welcome. The literature reviewed here suggests that barriers to veganism include identity and the ways in which dietary patterns particularly play a role in the performance of gender as well as notions of tradition and cultural norms. Lack of knowledge and information about veganism and plant-based diets, skills and relevant competences (especially in relation to food and food preparation) all feature within the literature as barriers. Inconvenience, cravings, and health and nutrition concerns are also noted as potential barriers and reasons given for returning to meat consumption from veganism. Associations between meat and masculinity are, the literature proposes, still dominant although it is important to note that recent studies suggest that the association is weakening and there is evidence that a 'masculinization' of plant-based diets is emerging. The feminisation of veganism through associations with non-meat products and other dietary practices is noted by a number of studies and therefore it is reasonable to assume that the gendering of food practices and food remain an important consideration when thinking about barriers and pathways to veganism. More broadly, stigma around veganism is still evident and concerns about social and familial conflict remain strongly implicated as barriers. Right wing ideology and conservatism are allied in the literature with higher levels of meat consumption and may also act as predictors of the potential to lapse back to meat consumption from veganism.

The literature overwhelmingly points towards the relative strength of health messages around veganism compared with moral arguments for meat reduction or adoption of plant-based diets. Critical Animal Studies scholars argue that the focus on health downplays that moral position and animals and their treatment remain out of sight. Outside of CAS scholarship, the mainstreaming of veganism via health messaging is thought to be a useful leverage point to shift consumption patterns more generally. However, the literature suggests that the moral position on veganism is more likely to result in long term commitment.

In terms of pathways to veganism, three key themes emerge from the literature: the role of celebrity culture and cultural influencers in mainstreaming veganism; the opportunities offered by social media and social media platforms; and, how affective (emotional) engagement can be deployed to mainstream and strengthen the moral position (in addition to the health message). Although the literature on these topics is small, they offer promising avenues for further investigation and informed the work of this research project. It is also apparent from the literature surveyed here that in relation to veganism there is an emphasis

of interest in the individual and perceived personal barriers and a lesser focus on institutional barriers. This reflects a neoliberal view of the individual as a consumer with personal accountability for their choices and shifts responsibility away from wider social structures and related inequalities. Institutional barriers and perceptions of institutional barriers are therefore another important topic for future research but are beyond the scope of this project.

4. Questionnaire

Method

The first phase of the project used a self-completed online questionnaire designed and circulated via Jisc Online Surveys. The survey was initiated in May 2018 and remained open for four weeks. Respondents were initially selected using convenience and snowball sampling. A link to the survey was distributed amongst closed social media groups known to the researchers and respondents were asked to share it via their networks. The questionnaire was also shared amongst the staff and students of two universities located in the North West and North East of England.

The questionnaire was conducted in accordance with the Edge Hill University Research Ethics Policy and Code of Practice for the Conduct of Research. Respondents were not obligated to participate in the survey. Written informed consent was obtained prior to completion of the questionnaire. At the end of the survey respondents were asked to submit an email address only if they wanted to be included in further research which they were informed would take the form of a face-to-face interview or focus group.

The questionnaire (see: appendix 1) included 6 demographic questions and 20 substantive questions. Design of the demographic questions followed the recommendations of Stonewall on gender. This gave respondents the opportunity to self-describe gender. UK census options were used for both religion and ethnic background. The religion question was made optional and included options for no religion. Social class was measured via a combination of income bands and occupation. Occupation was an open question that allowed participants to self-describe. Age was measured via conventional bands. The survey was targeted at only adult participants, defined as 18 or older. The substantive questions were divided into sections intended to gauge knowledge and experience of veganism, explore health meanings and further probe images of veganism and vegans.

In the first section, two closed questions asked respondents to describe their dietary identity and answer yes or no if they had ever followed a vegan diet. For those who had followed a vegan diet, an open question asked them to give their main reason for no longer being vegan. Closed questions with yes or no answers asked if participants had vegan family or friends, if they had eaten in establishments that served vegan food and if they had prepared or eaten a vegan meal. These were intended to gauge familiarity with the practice of veganism. For those who had tried a vegan meal, an open question asked about the taste experience of the meal. Respondents were then asked to rate their knowledge of veganism as either “high”, “medium” or “low”. An open question asked participants to assess how they would respond to the challenge to follow a vegan diet for one month. The final question in this section asked participants to rate the ease of being vegan now compared with a decade ago.

In the second section, four closed questions on health asked respondents to answer yes or no to whether veganism can be healthy, if meat or cow’s milk are essential to a healthy diet and if they would have any health concerns about becoming vegan. An open question

allowed participants to describe any health concerns in their own words. This section, in particular, was the focus of analysis in an interim report (Twine, Parkinson et al., 2018).

The third section included a question on which social groups the participants felt veganism was suitable for with an option to select as many groups as they wished. Two closed questions asked about the respondents' image of vegans as either "positive", "negative" or "neutral" and whether they would be concerned about the reaction of family and friends if they were to become vegan. Participants were then asked to rank the environmental impact of four different diets (vegetarian, pescatarian, omnivore and vegan). Respondents were given seventeen words drawn from vegan stereotypes and asked which they associated with veganism. An additional option allowed participants to add any other terms they associated with veganism. The final question asked respondents if they view veganism as a diet, philosophy, fad, belief system, moral position, health movement or lifestyle. Respondents could select as many as they felt were applicable.

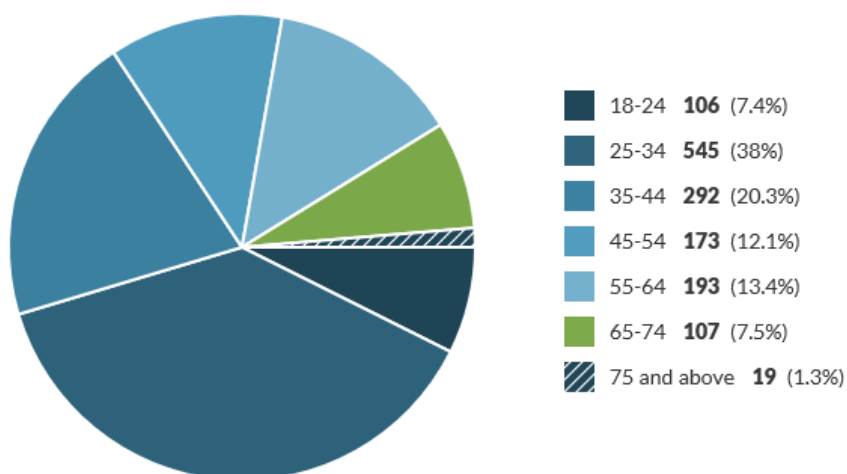
The survey responses were initially browsed to check for written informed consent, geographical location and dietary choice. Responses were excluded if participants were located outside the UK or if they were vegan. The dominant reason, by some margin, for exclusion from the dataset was that respondents were not resident within the UK. Jisc Online Surveys was used to summarise the survey responses and to create charts for the quantitative data. Analysis was undertaken by filtering using multiple criteria and cross tabulation. Cross tabulation was used to compare responses by gender and age. Filtered data was exported to Excel for analysis. The qualitative data was exported to Excel and categorised for thematic coding.

Questionnaire Results

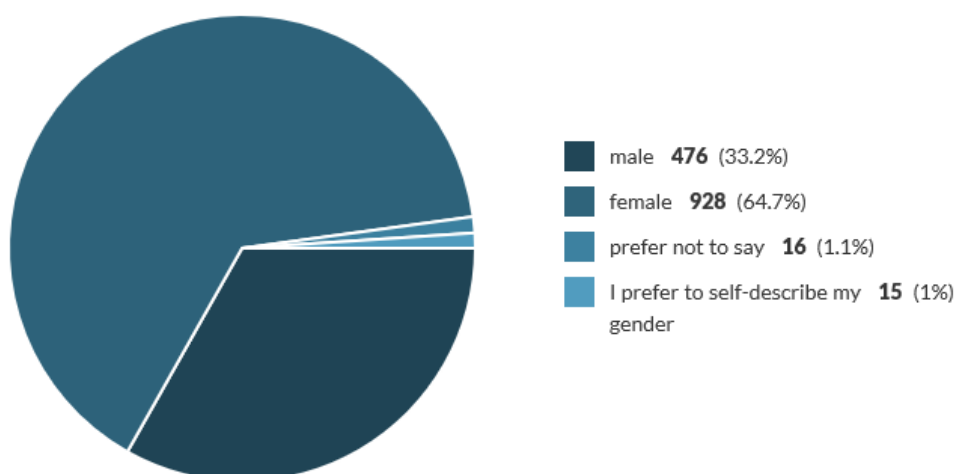
Demographics and the nature of the sample

There were 1674 responses to the questionnaire. After excluding those outside the UK and for other reasons (for example being vegan) the sample reduced to 1435 questionnaire completions. Almost two thirds (65.7%) of respondents were between 18 and 44. The greatest number of respondents were in the 35-44 age group. Female respondents accounted for just under two thirds (64.7%) of the questionnaire responses. Based on ONS population data total sample size results and sample results by gender have a confidence level of 95% and margin of error of 3% (z-score 1.96).

6.1 Age



6.2 Gender

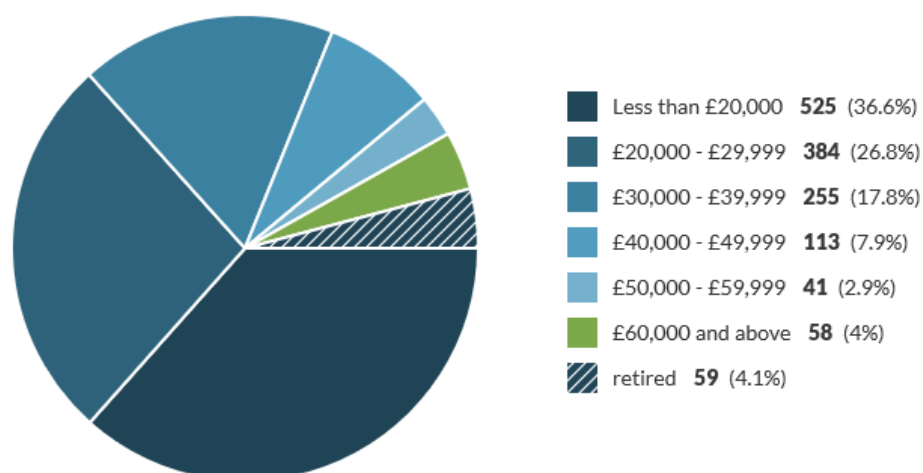


As 6.3 illustrates the sample was overwhelmingly white with 95.4% of respondents of white background. Ethnic group is an important demographic variable to explore in relation to veganism but would require a targeted methodology to construct an appropriate sample for analysis. We strongly recommend this for future research.

6.3 Ethnic group



6.4 Annual Income and Occupation



The median annual income in the UK, according to the most recent Annual Survey of Hours and Earnings, is £29,669 (ONS 2018). Although it is not possible to calculate an accurate median for our sample due to the use of wage band categories, 63.4% of the sample earned under £30k per annum. This means that the median of our sample was lower than the UK median. The questionnaire also asked participants to name their occupation. These results were coded using the categories of the Office for National Statistics, known as the Standard Occupation Classification. These results are presented below including a comparison with the national average sizes of these occupational classifications.

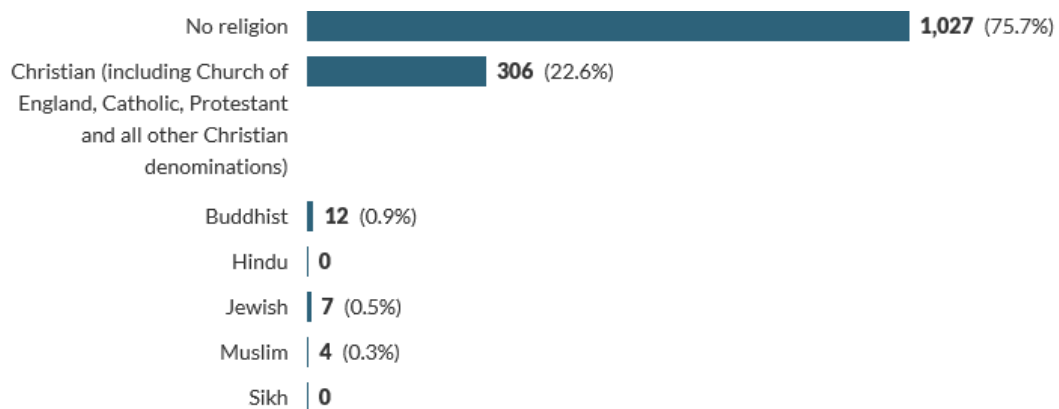
	Count	Percentage	national percentage
Administrative & secretarial	169	14.7	10.4
associate professional & technical	261	22.7	14.5
caring, leisure and other services	76	6.6	9.2
elementary	27	2.3	10.7
Process, plant & machine operative	11	1.0	6.4
professional occupation	383	33.3	20.1
managers, directors & senior officials	109	9.5	10.8
Sales & customer services	64	5.6	7.6
skilled trades	51	4.4	10.1
All:	1151	100	99.8
Retired	168		
student/PhD student	74		
Unemployed	19		
self employed misc	11		
other/missing	12		
Total:	1435		

As the data illustrates, our sample had a higher proportion of 'Administrative & secretarial' (14.7% versus 10.4%), Associate Professional and technical' (22.7% versus 14.5%) and 'Professional Occupation' (33.3% versus 20.1%); and a lower proportion of, most markedly,

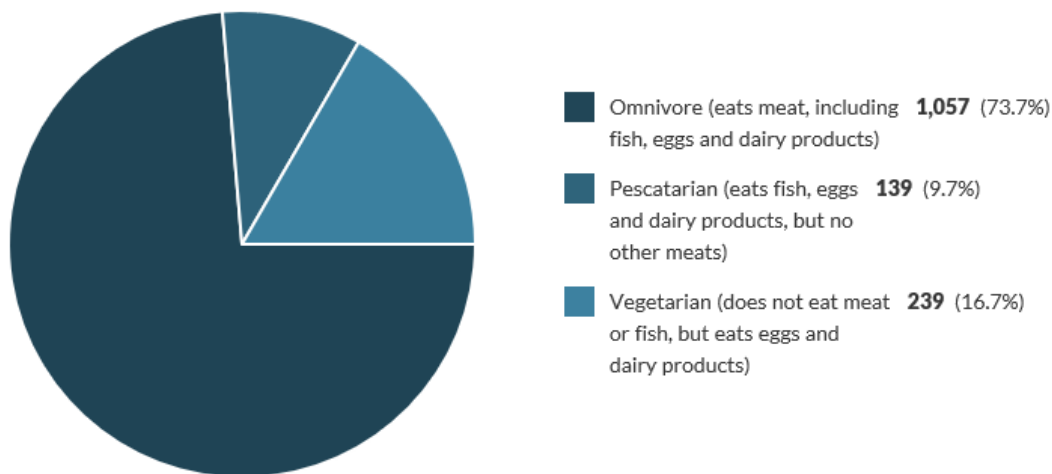
‘elementary’ (2.3% versus 10.7%), ‘Process, plant and machinery operatives’ (1% versus 6.4%) and skilled trades (4.4% versus 10.1%). Some of these differences could be assumed to imply higher income levels than those levels actually recorded. Therefore, we concluded it was more reliable to use income levels as a measure of economic capital and below we use the income data for the purposes of comparison with other questions from the questionnaire.

6.5 Religion

The sample contained a high proportion of respondents with no religion (75.7%), as seen in 6.5. The only religious affiliation reported in significant number was Christianity, 22.6% of the sample. Buddhists, Muslims and followers of the Jewish faith each constituted less than 1% of the sample. For some context these figures differ markedly from the UK 2011 census in which 59.3% of the population (in England and Wales) identified as Christian, 25.1% as having no religion and Muslims at 4.8%.



6.6 Current dietary choice



Our sample of non-vegans contained 1057 omnivores (73.7%), 139 pescatarians (9.7%) and 239 vegetarians (16.7%). This provided the opportunity to do some comparative analysis between the three groups which is commented upon below.

Substantive Questions

In this next section we present results for the entire sample (1435 people) for each substantive question of the questionnaire.

6.7a Have you ever followed a vegan diet?



6.7b

An important consideration for understanding how non-vegans construct veganism is to consider the reasons why those who have tried veganism have not maintained the practice. Therefore we thought it important for this question to ask a supplementary question of those who answered yes, in this case 237 people, or 16.5% of the whole sample. Specifically, we asked the following open question: 'If yes, what was your main reason for deciding to no longer be vegan?'. Twelve responses were excluded for reasons of lack of clarity or misunderstanding the question, leaving a sub-sample of 225 participants. We then coded the following responses as follows:

All responses	Total	Percentage
cheese	8	3.6
expense	10	4.4
health - protein & energy levels	10	4.4
health - disordered eating	6	2.7
health - other	50	22.2 (All health 29.3)
inconvenient - time consuming/lack of choice/availability	67	29.8
social/interpersonal	14	6.2
temptation/lack of willpower/motivation	32	14.2
temporary intention	19	8.4
lost faith	9	4
TOTAL	225	
Excluded responses totalled 12	237	
Note - 'health - other' contained many responses related to veganism being seen as restrictive due to other dietary requirements/allergies		

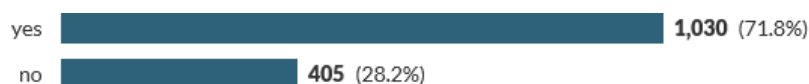
If we collate the three health codings together there are two clear dominant reasons participants gave for no longer being vegan. Health related reasons constituted 66 participants, or 29.3%, and reasons related to convenience (time, choice and availability) constituted 67 participants, or 29.8%. The response to this question, especially the health issues may be seen in light of answers also to 6.18b discussed at length below. Reasons related to inconvenience could be being addressed by recent expansions of many UK food outlets with regard to vegan food options, contingent of course, on people knowing about these.

6.8 Do you have friends or family who are vegan?



It is noteworthy that over 80% of our questionnaire sample had friends or family who are vegan. This implies that the sample was quite well socially connected and familiar with veganism. We use the responses to this question below to further probe how having vegans friends or family might shape how one views or constructs veganism.

6.9 Have you ever prepared a vegan meal?



This question was included also to gauge familiarity with and knowledge of veganism in our sample. With 71.8% stating that they had prepared a vegan meal, this further suggests that the sample of non-vegans on the whole had a degree of familiarity with vegan food (bearing in mind that 'vegan food' is consumed by everyone but often is not referred to as such).

6.10a Have you ever eaten a vegan meal?



The findings of the previous question are here further reinforced by the result that 83.9% of the sample have eaten a vegan meal adding further evidence to the sense that this sample of non-vegans had a high degree of familiarity with veganism.

6.10b

A supplementary open question was then asked of those who had replied 'yes' (leaving a sub-sample of 1204), 'how was your experience of the taste of the meal?'. Responses were coded into the following categories:

very positive	405
positive	439
neutral/varies	302
negative	41
very negative	4
no category	13

To explain the coding further, responses such as 'good' or 'nice' were coded as positive, responses such as 'great' and 'delicious' were coded as very positive. For negative responses, participants who used words such as 'boring' or 'lacking' were coded as negative, words such as 'horrible' or 'awful' as very negative. It is noteworthy that of the 1204 respondents, 844 (70.1%) were overall positive, while only 45 (3.7%) were overall negative. 302 (25.1%) responses were coded as neutral and used words such as 'not bad' or 'can't complain'. While it is likely that a proportion of the 844 positive judgements of the taste of a vegan meal came from vegetarian participants, the study overall included only 239 vegetarians. If the 844 overall responses are re-calculated as a percentage of the whole sample size (n=1435) it reduces to 58.8%, but still over half the entire sample. The result of this question, although focused on the taste of vegan food, could be taken as further evidence to suggest that this sample of non-vegans were overall positively disposed to veganism.

6.11 Have you ever asked a restaurant, on behalf of others, whether they have vegan options?



The results of this question gauged the degree of social connectedness of the sample with vegans and veganism. Over half of the sample had enquired on behalf of others, whether they had vegan options.

6.12 Have you ever eaten out at a café or restaurant which serves vegan options?



Over 90% of the whole sample had eaten at a café or restaurant which serves vegan options. This reflects the recent growth in the provision of vegan options at cafes and restaurants in the UK.

6.13a How would you rate your own knowledge of veganism?



This is a further question that was included to gauge familiarity with veganism. Although self-reported, only 10.5% of the sample reported that they had a low knowledge of veganism. Below we use the three sub-samples produced in this question and compare responses in a range of other questions.

6.13b If you were set a challenge to follow a vegan diet for a month, how do you think you would find it?

This was a wholly open question asked to all participants (n=1435), the only such question in the questionnaire. All of the responses were coded as follows:

Count	Code	Code Description
146	vd	very difficult
538	d	difficult
128	tt	tricky specifically due to a specific temptation/lack of adequate alternative (e.g. cheese OR eggs OR bacon) ok otherwise
23	ts	tricky specifically socially (including family reactions/pressures/obligation) ok otherwise
33	to	tricky specifically when out/travelling ok otherwise
49	da	difficult due to pre existing allergies/restrictions (including disordered eating)
358	ok	ok/not difficult/doable
181	e	easy
38	p	pricey/expensive
6	ns	not sure
10	u	unclear
34	hc	health concern
59	b	boring
18	r	refuse
1066	negative total	
539	positive total	
16	NS/U	

The totals at the bottom of the table exceed the overall sample size due to the fact that some participants answered in such a way that could be coded more than once. The results show that when faced with the possibility, the challenge, to eat vegan for a month there was a considerable degree of uncertainty and higher levels of ‘negativity’ in relation to many of the other questions. Answers were coded in such a way to give more detailed data on why some participants would view this challenge as difficult. These include such reasons as temptation, lack of alternatives, attachment to a particular animal product, social reactions, travelling, cost, perceived boredom and pre-existing health conditions of allergies. In total there were almost twice as many negative responses than positive.

6.1 Do you think eating vegan is easier today compared to 10 years ago?



This question was aimed to gauge awareness of the increased availability and opportunity to eat vegan compared with 10 years ago. A large majority, 90%, were of the view that eating vegan was easier compared to 10 years ago, which for the timing of the questionnaire completion was 2008. Indeed, only 25 out of 1435 participants (1.7%) thought that it was not easier. Consequently, even though nobody in this sample was vegan, there was the perception that the social presence of vegan eating had increased during the last decade.

6.15 Do you think that veganism can be a healthy way of eating?



A large majority of the sample, 84.1%, thought that veganism ‘can be a healthy way of eating’. Although this is a large majority and implies that there is a strong perception of the association between vegan eating and positive health, it should also be seen in the context of responses to questions 6.19a and 6.19b below.

6.16 Do you think that eating meat is essential for a healthy diet?



Almost the same proportion of participants (84%) did not think that eating meat was essential for a healthy diet. This is an interesting finding given that most of those answering ‘no’ would, themselves, have been consumers of meat.

6.17 Do you think that drinking cow’s milk is essential for a healthy diet?



We then asked a similar question in relation to the consumption of cow’s milk. An even higher proportion of participants, 91.8%, took the view that consuming cow’s milk was not essential for a healthy diet. All such participants (n=1317) were, in theory, consumers of cow’s milk, given that they self-identified as either omnivores, pescatarians, or vegetarians. This could suggest that the consumption of cow’s milk is more linked to habit, social norms, taste and convenience, rather than a strong commitment to its essential healthiness.

6.18a Would you have any health concerns about becoming vegan?

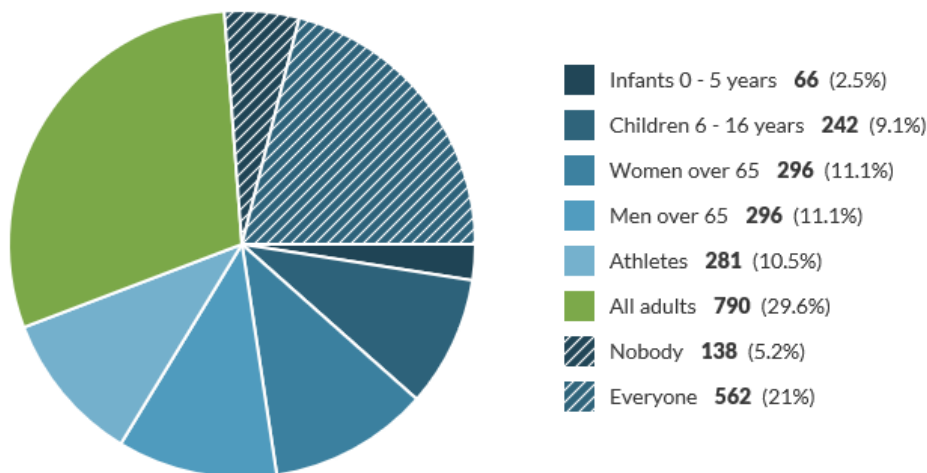


In spite of answers to the three previous health-related questions, a small majority of participants (52.2%) did report that they would have health concerns about becoming vegan. Consequently, we could say that although the sample clearly expressed views that veganism could be a healthy way of eating, and that the animal products of meat and cow’s milk were not essential to a healthy diet, there were still considerable health reservations about veganism. To examine in more detail what these could be we asked a supplementary open question for those who answered yes.

6.18b

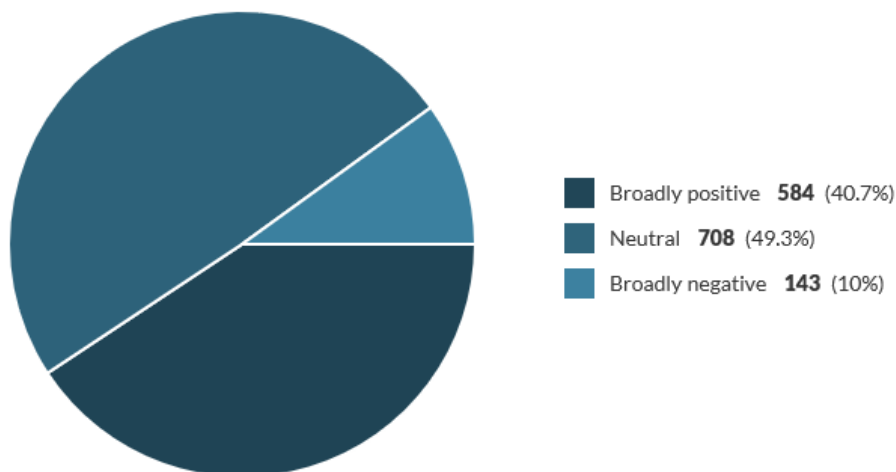
Dominant codes	Number
NDCs	446
PHCs	110

Two major codes clearly stood out from the results. Of the 749 'yes' responses, 446 expressed 'nutritional deficiency concerns' (NDCs), and 110 expressed concerns related to a 'pre-existing health condition' (PHCs). These can be seen as representing constraints against people considering trying a vegan diet. Accordingly, we comment upon this further below in the key findings and discussion sections.6.19 Which of the following social groups do you think veganism is suitable for? (please tick all that apply)



With this question we wanted to understand if participants thought veganism was suitable for everyone or whether they thought there were some demographic groups which they thought it was less suitable for. It is worth noting that the above percentage figures could be misleading because participants were able to tick more than one category. It is simpler to focus on the number totals instead. It is worth noting that only 66 participants (or 4.6%) of the entire sample (n=1435) thought that veganism was suitable for infants 0-5 years [there may also have been some misunderstanding of this question given that 562 participants (or 39.2%) of the entire sample thought that veganism was suitable for 'everyone']]. Low numbers were also recorded for pensioners of both sexes, athletes, and children agreed 6-16 years. Such findings also imply reservations over the healthiness of vegan eating.

6.20 What is your image of vegans?



In exploring how non-vegans construct veganism in this project we took the view that it would be limited to divorce that from how non-vegans construct vegans as well, since negative stereotypes of vegan people could also serve to dissuade people from adopting vegan eating practice. This question and elements of those below probe this. Here we found quite low numbers of participants having broadly negative views of vegans, 143 or 10% of the whole sample. Four times as many (584 of 40.7%) reported having broadly positive views of vegans, with the majority reporting a neutral view, 708 participants or 49.3% of the sample.

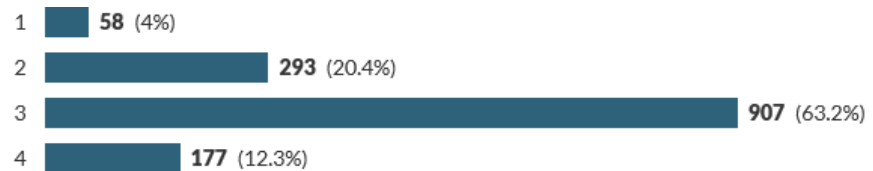
6.21 If you were to become vegan would you be concerned about the reaction of friends or family?



This question addresses both how participants perceive social responses to the identity of being vegan and how the practice could conflict with social relationships. A minority, 288 participants or 20.1% of the sample had concerns over reactions from friends or family.

6.22 Please rank the following diets in terms of how you perceive their environmental impact (where 1 = most environmental impact, and 4 = least environmental impact).

Vegetarian



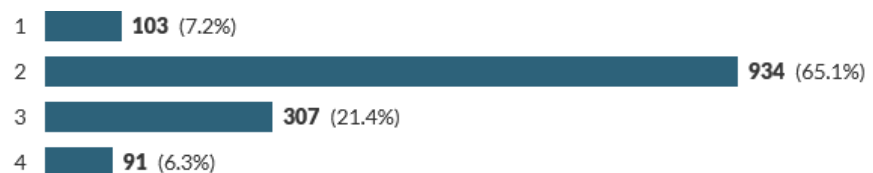
Omnivore



Vegan

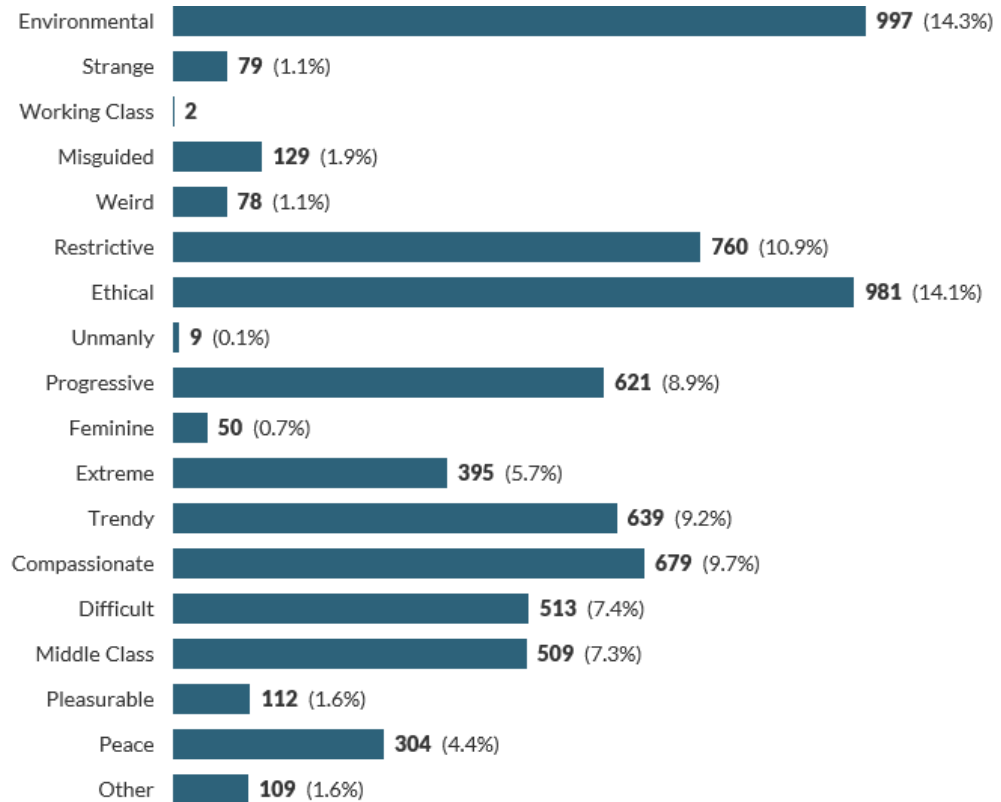


Pescatarian



This question explored participant knowledge over the environmental impact of different diets. It is worth noting that there were clear majorities in viewing an omnivorous diet as having the highest impact, a pescatarian diet the second highest impact, a vegetarian diet the third highest impact, and a vegan diet the least impact. Whilst we recognise the generalised nature of such statements it was important nevertheless to probe such perceptions. This result does indicate a majority awareness of vegan eating being (in theory) a way of eating that minimises impact upon the environment.

6.23a Which of the following words do you associate with veganism? (please tick any that apply)



This question explored constructions of veganism in terms of a broad range of associations. Some of the most chosen associations could be seen as positive: ‘environmental’, ‘ethical’, ‘progressive’ and ‘compassionate’. Negative associations overall received fewer responses, but ‘restrictive’ was the highest, and the third highest in total. Significant numbers also chose ‘extreme’, ‘trendy’ and ‘difficult’. Far more participants associated veganism with being ‘middle class’ as opposed to being ‘working class’ (509 versus 2). Associations related to gender: ‘unmanly’ and ‘feminine’ received conspicuously low numbers of responses.

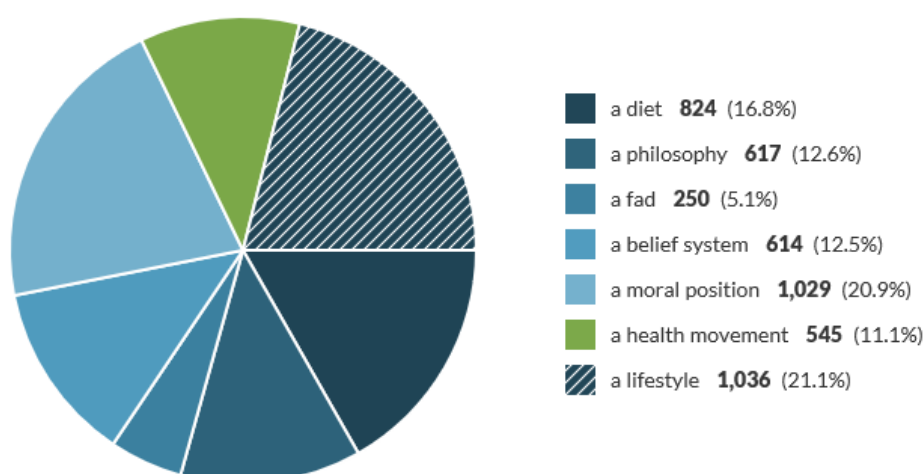
6.23b

Participants were able to choose ‘other’ and complete an open option if they wished to include other words or phrases they associated with veganism. 109 participants, or 7.6% of the sample chose this option. These were coded in terms of codes which yielded 5 or more responses. These are low responses in the context of the question and sample size as a whole but we include them here out of interest, and also to give voice to participants.

Responses with 5 or more mentions	
pushy/forceful/overbearing/aggressive	10
judgemental	8
preachy/evangelical	8
self-righteous/important/self-congratulatory/smug/superior/holier than thou	11
privileged/exclusive/entitled/expensive	9

These all reflect negative perceptions of vegans; this is noteworthy because the question actually refers to veganism and was not explicitly seeking associations with vegans. It is possible that had we constructed the question more broadly and included signifiers such as these that they could have yielded significantly larger response rates. It is probable that for a significant sub-sample, negative perceptions of vegans shape how they construct veganism more generally.

6.24 Which of the following do you view veganism as? (please tick all that apply)



This question was included to gauge how participants view veganism as a whole. As with question 6.19 the percentage figures should be disregarded as they reflect the ability of participants to choose more than one answer. Answers reflect the contested status of what veganism is (even within the vegan community), with largest responses here agreeing that veganism is a moral position (1029 participants or 20.9% of the sample) and a lifestyle (1036 participants or 21.1% of the sample).

Further specific results looking at questions 6.15 to 6.18

In this section we present results which focus on how responses to this section of the questionnaire differ when we narrow the sample, or cross reference these questions with responses to others. In the dataset below for each of the four questions we consider how responses differ by gender, age, income, no religion versus Christian, and dietary status. We also compare responses in relation to answers from two (6.8 and 6.13) of the other questions. Below we present the raw data which we comment upon further in both the questionnaire key findings and questionnaire discussion sections which follow after.

6.15 - Do you think that veganism can be a healthy way of eating?

Total Sample (1435)	Male (476)	Female (928)	18-24 (106)	25-34 (545)	35-44 (292)	45-54 (173)	55-64 (193)	65-74 (107)	75+ (19)	under 45 (943)	45+ (492)
Yes 84.1% (1207)	83.2% (396)	84.5% (784)	90.6% (96)	91% (496)	83.6% (244)	85% (147)	72.5% (140)	66.4% (71)	68.4% (13)	88.7% (836)	75.4% (371)
No 15.9% (228)	16.8% (80)	15.5% (144)	9.4% (10)	9% (49)	16.4% (48)	15% (26)	27.5% (53)	33.6% (36)	31.6% (6)	11.3% (107)	24.6% (121)

Retired (59)	Income less than £30k (909)	Income above 30k (467)	No religion (1027)	Christian (306)	Omnivore (1057)	Pescatarian (139)	Vegetarian (239)
66.1% (39)	85.8% (780)	83.1% (388)	86.4% (887)	76.5% (234)	79.5% (840)	94.2% (131)	98.7% (236)
33.9% (20)	14.2% (129)	16.9% (79)	13.6% (140)	23.5% (72)	20.5% (217)	5.8% (8)	1.3% (3)

6.8. vegan family or friends (1149)	6.8. no vegan family or friends (286)	6.13 high (559)	6.13 medium (726)	6.13 low (150)
87.9% (1010)	68.9% (197)	90.7% (507)	84% (610)	60% (90)
12.1% (139)	31.1% (89)	9.3% (52)	16% (116)	40% (60)

6.16 - Do you think that eating meat is essential for a healthy diet?

Total Sample (1435)	Male (476)	Female (928)	18-24 (106)	25-34 (545)	35-44 (292)	45-54 (173)	55-64 (193)	65-74 (107)	75+ (19)	under 45 (943)	45+ (492)
No 84% (1206)	81.9% (390)	85% (789)	83% (88)	85.3% (465)	84.9% (248)	86.1% (149)	79.8% (154)	80.4% (86)	84.2% (16)	84.9% (801)	82.3% (405)
Yes 16% (229)	18.1% (86)	15% (139)	17% (18)	14.7% (80)	15.1% (44)	13.9% (24)	20.2% (39)	19.6% (21)	15.8% (3)	15.1% (142)	17.1% (87)

Retired (59)	Income less than £30k (909)	Income above 30k (467)	No religion (1027)	Christian (306)	Omnivore (1057)	Pescatarian (139)	Vegetarian (239)
79.7% (47)	84.6% (769)	83.5% (390)	86.3% (886)	74.8% (229)	78.4% (829)	100% (139)	99.6% (238)
20.3% (12)	15.4% (140)	16.5% (77)	13.7% (141)	25.2% (77)	21.6% (228)	0% (0)	0.4% (1)

6.8. vegan family or friends (1149)	6.8. no vegan family or friends (286)	6.13 high (559)	6.13 medium (726)	6.13 low (150)
86.5% (994)	74.1% (212)	91.1% (509)	82.6% (600)	64.7% (97)
13.5% (155)	25.9% (74)	8.9% (50)	17.4% (126)	35.3% (53)

6.17 - Do you think that drinking cow's milk is essential for a healthy diet?

Total Sample (1435)	Male (476)	Female (928)	18-24 (106)	25-34 (545)	35-44 (292)	45-54 (173)	55-64 (193)	65-74 (107)	75+ (19)	under 45 (943)	45+ (492)
No 91.8% (1317)	91.2% (434)	91.8% (852)	92.5% (98)	93.9% (512)	93.2% (272)	91.3% (158)	90.2% (174)	81.3% (87)	84.2% (16)	93.5% (882)	88.4% (435)
Yes 8.2% (118)	8.8% (42)	8.2% (76)	7.5% (8)	6.1% (33)	6.8% (20)	8.7% (15)	9.8% (19)	18.7% (20)	15.8% (3)	6.5% (61)	11.6% (57)

Retired (59)	Income less than £30k (909)	Income above 30k (467)	No religion (1027)	Christian (306)	Omnivore (1057)	Pescatarian (139)	Vegetarian (239)
88.1% (52)	91.3% (830)	93.1% (435)	93.2% (957)	85.9% (263)	90.1% (952)	97.1% (135)	96.2% (230)
11.9% (7)	8.7% (79)	6.9% (32)	6.8% (70)	14.1% (43)	9.9% (105)	2.9% (4)	3.8% (9)

6.8. vegan family or friends (1149)	6.8. no vegan family or friends (286)	6.13 high (559)	6.13 medium (726)	6.13 low (150)
93.6% (1076)	84.3% (241)	94.8% (530)	91.7% (666)	80.7% (121)
6.4% (73)	15.7% (45)	5.2% (29)	8.3% (60)	19.3% (29)

6.18 - Would you have any health concerns about becoming vegan?

Total Sample (1435)	Male (476)	Female (928)	18-24 (106)	25-34 (545)	35-44 (292)	45-54 (173)	55-64 (193)	65-74 (107)	75+ (19)	under 45 (943)	45+ (492)
Yes 52.2% (749)	47.1% (224)	54.4% (505)	50% (53)	51.2% (279)	51% (149)	45.7% (79)	56.5% (109)	65.4% (70)	52.6% (10)	51% (481)	54.5% (268)
No 47.8% (686)	52.9% (252)	45.6% (423)	50% (53)	48.8% (266)	49% (143)	54.3% (94)	43.5% (84)	34.6% (37)	47.4% (9)	49% (462)	45.5% (224)

Retired (59)	Income less than £30k (909)	Income above 30k (467)	No religion (1027)	Christian (306)	Omnivore (1057)	Pescatarian (139)	Vegetarian (239)
59.3% (35)	53.5% (486)	48.8% (228)	50.1% (505)	56.5% (173)	55.3% (585)	48.2% (67)	40.6% (97)
40.7% (24)	46.5% (423)	51.2% (239)	49.9% (512)	43.5% (133)	44.7% (472)	51.8% (72)	59.4% (142)

6.8. vegan family or friends (1149)	6.8. no vegan family or friends (286)	6.13 high (559)	6.13 medium (726)	6.13 low (150)
50.8% (584)	57.7% (165)	47.9% (268)	55.2% (401)	53.3% (80)
49.2% (565)	42.3% (121)	52.1% (291)	44.8% (325)	46.7% (70)

Please note that male and female combined are less than the total sample size because 31 respondents chose to self-define their gender or preferred not to say.

Questionnaire key findings

- Over 84% of the sample of non-vegans thought that veganism could be a healthy way of eating.
- 84% of the sample did not think that eating meat is essential for a healthy diet.
- Over 91% did not think that drinking cow's milk is essential for a healthy diet.
- However, over 52% reported that they would have health concerns about becoming vegan.
- Concerns over nutritional deficiencies and concerns related to a pre-existing health condition were the most significant. 59.5% of all of these responses related to concerns over nutritional deficiencies. As a proportion of the overall sample this equates to 31% of the entire sample expressing nutritional concerns about a vegan diet.
- A higher proportion of women (54.4%) than men (47.1%) had health concerns about becoming vegan.
- A slightly higher proportion of male respondents (18.1%) thought meat was essential to a healthy diet in comparison to women (15%). It was very similar in terms of perceptions of drinking milk being essential to a healthy diet (8.8% of men, 8.2% of women).
- A higher proportion of respondents aged 45 and over (24.6%) did not think veganism could be a healthy way of eating compared to those aged under 45 (11.3%).
- These age groupings were broadly similar in their belief that meat was essential to a healthy diet (17.1% of those aged 45+, 15.1% of those aged under 45) but a greater degree of those aged 45 and over (11.6%) thought that milk was essential to a healthy diet, compared to just 6.5% for those aged under 45.
- Differences in responses from those in different income bands were not large, though most pronounced in regard to whether respondents would have any health concerns about becoming vegan. For those with an annual income of under £30k 53.5% had health concerns about becoming vegan, for those earning over £30k 48.8% had health concerns.
- Christian respondents held more negative beliefs in relation to the perceived healthiness of veganism compared to those with no religion. 23.5% of Christian respondents did not think veganism could be a healthy way of eating in contrast to 13.6% of those with no religion. 25.2% of Christian respondents thought that meat was essential to a healthy diet, compared to 13.7% of those with no religion. 14.1% of Christian respondents thought that cow's milk was essential to a healthy diet, compared to 6.8% of those with no religion. 56.5% of Christian respondents would have health concerns over becoming vegan, compared to 50.1% of those with no religion.
- Pescatarians and vegetarians held more positive beliefs about the healthiness of veganism in contrast to omnivores. For example, whereas 20.5% of omnivores did

not think veganism could be a healthy way of eating, only 5.8% of pescatarians and 1.3% of vegetarians thought so.

- Respondents who reported that they had vegan friends or family had a considerably more positive view of the healthiness of veganism. 87.9% of those with vegan friends or family thought that veganism could be a healthy diet, compared to 68.9% of those who did not. 13.5% of those with vegan friends or family thought that meat was an essential part of a healthy diet, compared to 25.9% of those who did not. 6.4% of those with vegan friends or family thought that cow's milk was an essential part of a healthy diet, compared to 15.7% of those who did not. 50.% of those with vegan friends or family had health concerns about becoming vegan, compared with 57.7% of those who did not.
- There was a marked difference in the perception of the healthiness of veganism between those who rated themselves as having a high knowledge of veganism in contrast to those who rated themselves as having a low knowledge of veganism. 90.7% of those who rated themselves as having a high knowledge of veganism thought that veganism could be a healthy way of eating, in contrast to 60% of those who self-rated their knowledge as low. 8.9% of those who rated themselves as having a high knowledge of veganism thought that meat was essential to a healthy diet, in contrast to 35.3% of those who self-rated their knowledge as low. 5.2% of those who rated themselves as having a high knowledge of veganism thought that cow's milk was essential to a healthy diet, in contrast to 19.3% of those who self-rated their knowledge as low. 47.9% of those who rated themselves as having a high knowledge of veganism would have health concerns about becoming vegan, in contrast to 53.3% of those who self-rated their knowledge as low.
- Large proportions of the sample had friends or family who were vegan (80.1%), had eaten a vegan meal (83.9%) and 90% thought that it was easier to eat vegan today compared with 10 years ago. Such findings could be taken to demonstrate the increased social presence of veganism in contemporary UK life.
- Respondents were less likely to view veganism as suitable for infants, athletes, children, and pensioners.

Questionnaire discussion

An initial notable characteristic was the lack of general negative view toward the healthiness of veganism expressed by a sample that was predominantly omnivore. This was not unexpected given that recent studies point out the mainstreaming of health messages about veganism (Beverland, 2014; Bresnahan et al., 2016; Doyle, 2016). The high numbers of respondents who did not think that meat or cow's milk are essential to a healthy diet implies a loosening of social norms which have traditionally assumed and conflated a balanced and healthy diet with the regular inclusion of animal products. Indeed, our sample expressed a strong belief that veganism can be a healthy diet, even though that was interestingly countered to an extent by just over half of the sample expressing that they would have health concerns about becoming vegan. Exploring the main reasons for this concern suggests that advocates of plant-based diets should reflect upon the nutritional knowledge of target publics generally, and more specifically that veganism is still perceived by many to potentially involve nutritional deficiencies, a central theme that emerged in the focus groups and which we explore in more detail later in this report. It is worth remarking again here on other studies that point towards the mixed messages about meat consumption in popular culture and their impact on the public understanding of both omnivorous and vegan dietary choices (Beverland, 2014; Bresnahan et al., 2016). That pre-existing health conditions may also make it less likely for people to transition to veganism, partly because people are unsure how following a vegan diet might interact with their pre-existing health, also implies that this could be an area which vegan organisations ought to address.

The broader literature on the social meanings of meat have persistently pointed to the masculinisation of meat implying that it could be less likely for men to become vegan due to the identity supports that the symbolism of meat consumption provides to men invested in particular social scripts of masculinity. However cultural meanings of masculinity are also in flux and it is fair to say that an increasing number of men reject traditional social constructions of masculinity. This potentially opens up pathways to non-traditional practices such as veganism (DeLesson-Parson, 2017; Mycek, 2018). So, whilst a slightly larger proportion of men in our sample thought that meat was essential to a healthy diet (at 18.1% still a low figure we would argue), more women expressed health concerns over becoming vegan. Here we could suggest that the feminisation of health concerns reported by gender and health research (Courtenay 2000; Wang et. al. 2013) is outweighing the gendering of food practices. This could suggest that even though the proportion of vegans in the UK is already disproportionately female more women specifically could be attracted to vegan eating by being assuaged of their health concerns. However, given that close to a third of the *entire* sample expressed nutritional concerns over a potential transition to vegan eating this is clearly an area for attention generally. We explore this issue further in the findings from the focus groups where nutritional deficiencies, health, and attachments to meat were key themes.

Certain age differences surfaced in relation to the sub-set of health-related questions, with over 45s less convinced of the healthiness of veganism and more attached to cow's milk

consumption as an essential component of a healthy diet. This is likely to reflect generational differences in food practices and could add to evidence that younger age groups are losing their attachment (to an extent) to milk in particular. However, data from the interviews and focus groups undertaken as part of this project demonstrate a more complex picture in relation to generational responses especially around reasons for self-exclusion of specific animal products from diets by over 45s.

Although not a perfect measure of social class, annual income on the whole did not show noticeable differences on the health sub-set questions, apart possibly from question 6.18. Here 53.5% of those earning less than £30k per year reported having health concerns about becoming vegan, whereas 48.8% of those earning more than £30k per year did. Again, this is not a large difference and may be influenced by various factors such as the gender pay gap, childcare responsibilities and the proportion of women undertaking part-time work.

Question 6.7 highlighted that 16.5% (237 people) of the sample were in fact ex-vegans. Question 6.20 probed the image of vegans which respondents had. It is noticeable that only 10% reported having a negative image of vegans which seems to align well with the early positive answers (especially to Q.6.15) around seeing vegan eating (the practice, rather than the practitioners) as a way of eating that can be healthy. Question 6.22 asked respondents to rank different diets around how they perceive their environmental impact (omnivore, pescatarian, vegetarian and vegan). Whilst this is a complex issue and clearly just as some omnivorous diets have more impacts than others (the same applies for pescatarian, vegetarian and vegan diets) this question was interested in perception, how respondents constructed these ways of eating in an environmental sense. There was a clear ranking from respondents in terms of a perception that an omnivorous diet had the most environmental impact, then pescatarian, then vegetarian, then a vegan diet perceived as having the least environmental impact. This is a notable finding because it does convey a sense of intelligibility from our sample around their knowledge of the environmental impact of different ways of eating, and in common with questions such as 6.15 and 6.20 does contribute to a positive construction of veganism by a majority of respondents.

5. Focus groups

Method

This part of the project investigated non-vegan responses to pro-vegan messages that might be encountered in daily life and particularly via social media. The research team conducted four focus groups between November and December 2018. Each focus group lasted around sixty minutes. The sessions were audio recorded and focus group respondents were given vouchers as an incentive to participate.

Recruitment for the focus groups was conducted via the initial project questionnaire, through internal university communication channels and via a convenience sampling method. Eligibility criteria for inclusion in the focus groups were regular meat and dairy consumption within the last 12 months. To explore differences in generational responses in non-vegans towards pro-vegan messages, a non-proportionally representative diverse sample that covered all age ranges represented in the questionnaire was purposefully selected to elicit a range of views. Two groups included participants from age ranges between 18 and 54. One focus group was convened with participants from the 18-24 age range and one group was composed of participants over the age of 55. In terms of gender, the proportion of male and female participants in the focus group broadly matched that of the questionnaire respondents. The focus groups were used to explore further some observations from the questionnaire data.

Following the findings of Guest et al 2017 on the number and sizes of focus groups necessary for an evidence base, four focus groups were convened with participant numbers limited to a minimum of six and maximum of eight per group. Guest et al found that 80% of all themes on a topic were discoverable within two to three focus groups and that the most prevalent themes were identifiable with three focus groups with a mean of 7.75 individuals per group. As the eligibility criteria (individuals who had regularly consumed meat and dairy in the last 12 months) allowed high levels of demographic heterogeneity, four focus groups were convened. Each focus group employed scripted questions, rating and picture sorting as elicitation techniques to reach saturation (the point at which new information produced little or no change to the coding). The demographic heterogeneity of participants overall did not affect the anticipated saturation which was reached after three focus groups.

Group	Number: female, male	Age group
1	5 f; 2 m	18-24; 25-34; 35-44; 45-54
2	6 f; 1 m	18-24; 25-34; 35-44; 45-54
3	3 f; 5 m	18-24
4	6 f	55-64; 65-74; 75 and above

Before the sessions began, the research team ensured that participants were fully informed about the project and each participant signed a consent form. To begin the focus group session, there was a brief introduction to the project and to those involved. The participants were then given a copy of The Vegan Society definition of veganism and informed that this was the definition used throughout the project: 'Veganism is a way of living which seeks to

exclude, as far as is possible and practicable, all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose' (TVS, 2018).

Each group was presented with a series of images and text taken from advocacy campaign materials, news outlets and social media. The messages were organised into three clusters: health; environmental; and, animal ethics. The three message clusters were designed to represent the dominant discourses connected to veganism and which, according to the academic literature, underpin motivation to move to a vegan diet and/or lifestyle. Each group of messages included at least one statement based on an academic study and one celebrity endorsement. The media presented to participants were in the form of single A4 print outs, the substance of which was designed to replicate the amount of visual information that might be accessed via social media or visible on a PC screen. Where news media sources were used, a range of news outlets that represented left wing, right wing and centrist views were included. The sources for each message were made available to the participants.

The participants were not informed about the message groupings. The moderator began each session by presenting the group of messages in the middle of a table and asking the participants to spend some time looking at them and to indicate which message caught their attention. They were told that where there was text there was no expectation that they read it in full. The message groups were presented in the order: i) health ii) environment iii) animal ethics. When the moderator judged that the group had had adequate time to look at the examples, the participants were asked to identify which message had particularly caught their attention and for what reason. As the discussion proceeded, the moderator probed for responses to the following topics:

- **Trust in the message:** We explored why some pro-vegan messages were more trustworthy or credible than others. We asked the groups to arrange the messages into piles according to their credibility and explored the reasons why some messages were disregarded.
- **Trust in the source:** We explored participants' understanding of the different sources and asked them to talk about which sources they believed to be trustworthy in relation to this type of message. We explored who had authority and credibility to make pro-vegan claims and why.
- **Affect:** We explored how the messages made the participants feel and why.
- **Projection:** At the end of each session we asked the participants to imagine they were creating a pro-vegan campaign and asked which of the images and/or text they had seen during the session would be most effective. We explored reasons why particular messages were selected.

Each group was asked to decide which messages they regarded as credible and place them in a pile. In addition to analysing the groups' ratings of credibility, focus group discussions were analysed using thematic analysis. Two researchers from the team identified emerging themes and assigned statements to a subtheme. The subthemes were then clustered into a series of categories that were agreed by both researchers:

- Authenticity
 - Trends
 - Evidence/ scientific proof/ objectivity
 - Celebrity culture
- Abstention and lack
 - Dietary restriction
 - Deficiencies
 - Balance
- Personal choice and autonomy
 - Emotional manipulation
 - Rational choice-making
 - Self-exclusions from diet
- Barriers
 - Disempowerment
 - Social discomfort
 - Tradition
 - Cost
 - Knowledge

Focus groups results

As a group, which of these messages do you regard as credible?

No.	Message group	subject	Message type/ source	No. of groups that rated message credible
1	Health	Position statement	Academic article abstract	4
2	Health	Vegan endorsement by male sportsperson	news article	0
3	Health	Vegan diet information	Health website	4
4	Health	Veganism and diabetes	Health website	4
5	Health	Vegan female celebrities	Online magazine article	0
6	Health	Vegan diet health	Health website	4
7	Health	Male vegan strength athlete achievement	Online magazine article	0
8	Health	Balanced vegan diet	UK media food website	2
9	Health	Male celebrity endorsement of veganism	News article	0
10	Health	Female vegan sportsperson diet	News article	2
11	Environment	Environmental impact of meat and dairy	News article	2
12	Environment	Environmental impact of meat and dairy	International news website	2
13	Environment	Economics of plant-based diets	Trade press article	1
14	Environment	Environmental impact of meat and dairy	Science website	0
15	Environment	Environmental impact of meat and dairy	News article	2
16	Environment	Celebrity explains reasons for going vegan	Magazine article	0

17	Environment	Environmental impact of meat and dairy	Magazine article	2
18	Environment	Environmental impact of meat and dairy: celebrity comment	News article	0
19	Environment	Environmental impact of meat and dairy: celebrity comment	News article	0
20	Ethics	Animal exploitation/ pro vegan message	Advocacy campaign	2
21	Ethics	Animal exploitation/ pro vegan message	Advocacy campaign	1
22	Ethics	Animal exploitation/ pro vegan message	Advocacy campaign	1
23	Ethics	Animal exploitation/ infographic message	Advocacy campaign	2
24	Ethics	Vegan advert cleared by standards body	News article	1
25	Ethics	Celebrity statement about going vegan	Celebrity Twitter	0
26	Ethics	Animal exploitation/ pro vegan message	Advocacy campaign	1
27	Ethics	Animal exploitation/ pro vegan message	Advocacy campaign	0
28	Ethics	Animal exploitation/ pro vegan message	Advocacy campaign	0
29	Ethics	Animal exploitation/ pro vegan message	Advocacy blog post	0
30	Ethics	Animal exploitation/ pro vegan message	Advocacy campaign	0
31	Ethics	Welfare standards in slaughterhouses	News article (with link to video)	4

If you were designing a pro-vegan campaign which messages would be most effective?

Group	Number: female, male	Age group	Effective messages ranked from most to least effective
1	5 f; 2 m	18-24; 25-34; 35-44; 45-54	Health, environmental, ethics
2	6 f; 1 m	18-24; 25-34; 35-44; 45-54	Health, environmental, ethics
3	3 f; 5 m	18-24	Health, environmental, ethics
4	6 f	55-64; 65-74; 75 and above	Health, ethics, environmental

Authenticity and credibility

Across all focus groups there was a high degree of scepticism towards pro-vegan messages generally. For all focus groups, the least credible messages were those in the ethics group. One participant explained the reason for that view in the following way:

"It's the authenticity that matters. If it's an independent group doing it then yeah but if it's a group specifically set up to promote veganism then it's always going to have some sort of bias towards it so it's just not credible."

Participants also mentioned the source as contributing to the view that advocacy messages lacked credibility. Across the focus groups, by far the most recognised of the advocacy groups was PETA. This group was most frequently mentioned as an example of sources that lacked credibility in the ethics message cluster. One participant commented:

"This is just ridiculous. One of the reasons is, it's from PETA. It really really wants you to see veganism as the only way. I think the way they address it is too extreme."

One participant referred to advocacy groups as being responsible for creating "animal cruelty myths" and commented that there was a lack of "factual truth" in the messages. When the credibility of advocacy messages was scrutinised in the focus groups, many participants dismissed them as "ridiculous". Some participants referred to the need for evidence or scientific proof to support advocacy group pro-vegan claims:

"This compares us to pigs! Just like us, just like our pets, just like our children. We're all like pigs, that's what that message implies. Where's the proof for something like this?"

"What is this trying to say? Is it that we're too old to drink milk? Some people say that milk isn't good for you after a certain age. It's very confusing. What science is this based on?"

The participants expressed widespread distrust of the mainstream media and cynicism towards the press generally. In relation to the credibility of news articles there was an insistence that pro-vegan claims should be backed up by "fact", "real studies" and "scientific evidence". This was particularly notable in relation to the environmental messages and to a lesser degree in relation to the health messages. Where news articles reported on studies, there remained a high degree of doubt amongst many participants about the credibility of the message:

"See it says here 'study shows' but what study? Who did the study? Are they experts?"

"Where it says there's a study, I mean, have they taken everything into account? I mean you can't say this one thing, that veganism is going to make the difference. What about all the other factors. What about those?"

In three of the four groups, the environmental message cluster was least familiar to participants. Where there was familiarity it was noted by participants that their awareness was due to recent press coverage of the issue. One female participant recalled:

"Yeah, I feel like I've only found out about that quite recently. It's been in the news a lot. It started off as eating insects, mosquitos, and in the jungle eating worms is more sustainable, and now it's all about cattle and the destruction of the rain forests. I feel it's more a new thing that's come to my mind now."

One female participant explained that she doubted the pro-vegan environmental messages because she mainly associated veganism with health:

"I don't know. I don't see it in this way. I don't think oh veganism, then automatically think of the environment, helping the environment. I think of it more as health, you know, in a health way. So, I see it as a by-product of health, you know helping the environment, and it's a bit controversial to have it presented in this way because there's going to be other factors that they don't even mention in there."

It was felt by many participants that in the examples shown to them, often the press headlines did not reflect the substance of the article. Press headlines were widely criticised by participants who referred to them as "propaganda", "clickbait", "misleading" and "lies". For example, three of the four groups discussed at length an article on a vegan powerlifter who was reported to have recently broken a weightlifting record (message no. 7). Participants commented that they found it difficult or "impossible" to believe the article. The main reason given for this response was that powerlifters would need a meat-based diet. One female participant said:

"I know lots of bodybuilders and powerlifters and they eat so much meat and so much dairy and eggs. How could you possibly be that strong and that big if you're vegan?"

Discussion on this issue turned to how long the powerlifter had been vegan for and whether the claim could be considered truthful. One female participant pointed out that the powerlifter might have been recently vegan but had "built his muscle on a meat-based diet". The participants in the group all agreed that it was important to establish how long an individual had been vegan to ascribe any authority to their claims. When asked by the moderator how long an athlete would need to be vegan to be considered a 'vegan athlete', there were mixed responses from one group which included, "from birth", "one year", "five years" and "ten years". In the under-25 group, the same discussion elicited responses of "3 months", "6 months" and "1 year". Another group agreed that claims for the benefits of veganism in athletes and sportspeople had to be linked to an improvement in performance at least 3 months after moving to a vegan diet. One male participant commented:

"I'd say he's built most of his muscle from eating meat. You can't say you're a vegan-based athlete unless you've been vegan for at least a year. Someone like David Haye, he's been doing it for quite a few years hasn't he, so he's been vegan for four or five years. He's

actually done all his fights vegan. I mean he's had fights before he's been vegan, but he's made his name after he's vegan. So, he's not one that's benefitted massively from the meat before they become vegan. Then there's these who get the benefits of the meat, have their career, then say they've gone vegan but it's just to convince other people to go vegan."

A male participant described all the articles on vegan sportspeople as "very questionable" and said:

"Thinking of veganism, looking at that picture and what I know, they must eat steak now and then and so maybe there's a kind of disbelief. I'd have to look more into the articles to find out what I need to know and find a proper answer".

Across all groups, celebrities were judged to lack credibility as sources of fact or for information about veganism. Celebrity claims were regarded as "trivial", "just opinion" and without substance:

"Coming from someone who's popular and just saying 100% vegan and joyous day it's just stupid. The way she's tweeted it. Joyous. The way she's worded it, it's stupid."

Participants also referred to some celebrity claims as "hypocritical". Two examples in particular attracted this criticism (messages 18 and 19). Participants in one group felt that the pro-vegan environmental claims by an F1 driver were hypocritical (message no. 19). An old image of a famous bodybuilder (message no. 18) that accompanied a 2018 article about the celebrity's support for meat reduction was widely criticised by participants who thought that there was an implication that the bodybuilder had always been vegan. A male participant commented:

"He's hypocritical. He's definitely eaten more meat than anyone in this room. I'd read it because that's my interest anyway but if I saw him on anything I'd probably read it but this, well, it's just funny and laughable because he doesn't look like a vegan does he? He wasn't then but he maybe he might be now."

Participants observed that celebrities would often claim to be vegan to attract publicity. One male participant explained that he found it difficult to believe any of the celebrity claims for veganism because he doubted their sincerity generally:

"People just announce things. People just say they're going vegan, they announce a lot of things just to get attention. They want to get headlines."

There was an overriding feeling expressed by participants that celebrity statements about veganism in relation to health benefits or environmental concerns were individual "opinion" and therefore could not be taken as having any factual basis. Participants referred to celebrity veganism as "a trend" or "trendy". Participants in the over-55 focus group agreed that celebrity veganism was an "in thing" a "fad" a "trend", "attention getting" and held no interest for them.

Older participants expressed the view that celebrity endorsement of veganism was aimed at young people. Older participants in three groups said that they had no interest in celebrity culture so would not have any interest in reading the celebrity articles. The under-25 group were highly sceptical about celebrity pro-vegan claims. One male participant said:

“This is a clickbait type of article. It’s just talking about a celebrity rather than veganism and if you read into it, it doesn’t say anything about how, it just says, oh, he’s James Cameron, he did all these things. Say it was an NHS doctor or a dietician that said it, well then, yes, but some film director said it and I wouldn’t call him an expert in the field.”

Although the participants felt that there was little factual information to be gained from celebrity claims, participants under 55 in three groups said they were more likely to read a celebrity article about veganism than any of the other pro-vegan messages presented during the focus group. In these cases, participants were interested in the personal stories of the celebrities and felt that they would read such articles out of curiosity about celebrity lifestyles. One female participant said:

“It makes me want to read it more. I look at that and think there’s no way she could look like that and be vegan so then you want to see what she does and how she gets the way that she is while being vegan.”

A male participant said:

“If there was a link provided on Twitter or something, I’d go straight to it. That would grab my attention. I’d be 50 50 on reading it but because it was that footballer in particular, it would be interesting to read because of who he is.”

Abstention and lack

Although the moderator did not point out to participants that the messages were grouped according to health, environmental and ethics discourses, participants noticed that the messages were clustered. In the case of the health cluster particularly, participants in each focus group observed that the messages presented a pro-vegan (rather than neutral or anti-vegan) position. All participants had some level of familiarity with the connection between a health message and veganism but were not necessarily aware of which organisations might endorse such a message. Participants expressed a view that “a meat eater’s diet is varied” while veganism was perceived as “not varied”, “just vegetables”, “grass” and there was a belief that vegans were “missing out”.

Some participants saw pro-vegan health messages as being of interest only to people with pre-existing health conditions and in need of a “special diet”. One female participant pointed out she did sport and had no concerns for her health so felt that the pro-vegan health messages did not apply to her but that an article about veganism aiding recovery in elite sportspeople was something she would find of interest. Female participants in two

groups commented at length about vegan health messages being a type of restrictive diet advice. One participant said:

“To me they all pose veganism as a really good thing. There’s not anything negative. They say, oh, these celebrities are vegan, or this vegan is really strong, that’s the kind of message that it sends but it’s a lot of diets. It says, oh, if you do this, it will be really good for diabetics, or this association says that doing this is good for you. It’s all about diets and dieting.”

Many participants expressed familiarity with a link between veganism and weight reduction. One group held the view that veganism as a means of weight loss was likely to be unhealthy. Participants in the over-55 focus group took a different position and felt that there was a link between veganism and healthy weight loss. One female participant commented about the cluster of pro-vegan health messages:

“I know about the health benefits. I go to Slimming World and they’re always going on about vegetables and non-meat products which do boost weight loss as well. It’s filling. I do like vegetables, I do, but unfortunately I have meat with them.”

Another female participant who had previously tried a vegetarian diet explained that she found veganism too restrictive but considered it an effective weight loss diet when compared with vegetarianism:

“My husband went on a vegan diet because the doctor told him that eating meat is the worst thing for diabetics and he’s gone from sixteen stone to thirteen stone eight but I put on eight pounds. The doctor told me when you go on a vegetarian diet, this is not a vegan diet, when you go on a vegetarian diet you eat more cheese and that’s why I put on more weight. Obviously, if I hadn’t had cheese, butter things like that, if I’d tried a vegan diet, then I wouldn’t have put on the weight, I wouldn’t have had those problems.”

The article about the benefits of veganism for people with diabetes was considered by all groups to be from a credible source and many agreed that veganism could be useful as a “special diet”. Participants in three groups agreed that while veganism in this context would not be of interest to them they would suggest health-related information about veganism to a friend or relative with diabetes. Two participants who had experience with diabetes (either having the condition themselves or having a partner with the condition) said they were familiar with medical advice to reduce the consumption of animal products, had followed the advice, and felt that change had made them aware of the potential health benefits of a vegan lifestyle. The over 55 group discussed the article at length. The participants acknowledged the benefits but agreed as a group that veganism was a form of restriction and abstaining from animal products long term, even if it brought specific health benefits, was a barrier. One female participant summarised the group’s view in the following comment:

“We’ve known a lot of people who were diabetic and they’re not diabetic any more. It’s from eating a lot more fruit and veg. It’s healthy food isn’t it but you have stick to a diet and that’s not easy.”

Participants in all groups discussed the dietary deficiencies they associated with veganism. One participant summarised the view as follows:

“You tend to think if you’re vegan you’re not healthy, you’re not having this, you’re not having that. You can’t be healthy. You need these other things. You need to have the other foods.”

One participant mentioned a lack of B12 as an issue. All groups mentioned lack of protein as a key concern with some participants making clear distinctions between animal and plant-based proteins, regarding the former as being a higher quality form of protein. One female participant commented:

“I can see why people would cut out meat, because of the animals, but what concerns me is where do you get your first-class protein from. You only get first class protein from animal products don’t you. I mean if you eat beans and all things like that, that’s second-class protein. I can understand people going vegetarian, but I can’t understand going vegan.”

Female participants tended to discuss lack of protein in relation to general health while male participants commented on protein deficit in relation to sport, performance, physical appearance and muscularity. Allied to the perceived insufficiency of quality protein, there was also a concern that a vegan diet would lack calories. Discussions about calorific lack also reflected many participants’ views that a vegan diet was primarily composed of vegetables. Male participants in one group commented on the image of a vegan footballer:

“When I read it I thought, what a dickhead. I thought you’re an athlete, you’ve got to have an amount of calories every day; then you’re training, playing football twice a week, so you would be burning more so I don’t get how you would get that many calories in your system from eating vegetables.”

And, about the image of a vegan powerlifter:

“To maintain his size, he’d need about six thousand calories per day. To get that from a vegan diet you’d have to be eating 24/7.”

In each group participants expressed surprise at the pro-vegan materials presented and commented that the messages and images contradicted what they had previously thought about veganism and vegans in relation to lack and deficiency. One male participant pointed out that the images of vegan athletes went against “the stereotypes of the weak vegans” that he had previously assumed to be true due to perceived dietary deficits. In relation to the images of vegan sportspeople, another male participant expressed the view in relation to anticipated dietary shortfalls:

“I always assumed if you were a top athlete you’d need protein from meat, so this is all news to me.”

During a discussion about expectations that vegan dietary deficiencies would impact on body shape and muscularity, a male participant expressed surprise over the image of a vegan powerlifter explaining:

"This is not what I would think of, or what people at home would think of as being vegans; you know, that they'd be all grass-eating skinny people."

A female participant commented:

"You wouldn't think Serena Williams was a vegan, you know just by her build. That really surprised me reading that."

In a discussion about veganism, deficiencies and health a female participant commented:

"You tend to think that on a vegan diet you you're not going to get all your nutrients, vitamins, things like that but it's interesting to know that you can, through fruit and through different types of milk. I think they do an oat milk so you're actually cutting down for the animals as well as from the health aspect of it."

Some participants talked about the conflict they felt but how the possibility of dietary deficiencies stopped them from making changes:

"When I think of giving up meat I think well you've got to have meat but when I see how the animals are treated and force fed and kept, that just turns me and makes me feel like eating less sometimes."

Participants stated that meat was required in the diet of athletes, particularly to "make" or "build muscle". For this reason, they felt that pro-vegan claims made by sportspeople were not credible and that meat specifically was essential for muscularity. A female participant expressed a popular view from in the 18-25 group about an article on a professional tennis player's vegan diet:

"I look at Serena Williams and I see, you know, a strong independent woman and from the way her arms look in this one picture there's no way she eats just like the grassy food. You know she's got to eat a big steak every now and again to get muscles like that. That's what I think."

This group expressed strongly the view that muscularity and body size in athletes was linked to levels of meat consumption. Participants made comparisons between the bodies of different sportspeople and the levels of muscularity to judge whether meat had been excluded from their diets. One female participant expressed a widely held view in the group:

"When I look at the picture of the footballer, I can see he's a lot smaller so yeah, maybe he's a vegan, but not the powerlifter. Look at the size of him."

The term 'balance' was used repeatedly throughout the groups often as a corrective to perceived imbalances related to veganism. Many participants talked about the concept of a "balanced diet" which was contrasted with ideas about the imbalanced, deficient or restrictive vegan diet. The term was used frequently in one group in relation to the need for "balanced reporting" on veganism and across all groups participants talked about the need for a "balanced view" about veganism. For example, one group agreed that a BBC article on vegan food was both credible and interesting because it was a good example of being balanced and moderate in its position on veganism. Some participants also commented on a perceived tendency for vegans to be "biased" and "not balanced" in their refusal to acknowledge non-vegan viewpoints. In another group, participants agreed that there was too much emphasis on how healthy a vegan diet can be and that it can be as "unhealthy and unbalanced as any other diet". A male participant commented:

"This is about a balanced diet for vegans. This is always there at the time when veganism is discussed. There's always this implicit assumption that a vegan diet is, you know, in itself, one of the best diets you can have. But there's balance and on some level it's possible to have an unbalanced vegan diet and no one explains what it means to have a balanced diet. I found this almost needs to have a caveat to say that it's no good if you just sit and eat Oreos all day."

Personal choice and autonomy

A theme throughout the focus groups was the extent to which veganism was perceived to infringe aspects of personal choice and autonomy. Participants in all groups commented that what they ate was their choice and in three of the four groups participants expressed the view that the ethics messages more than any other message cluster tried to tell people how they should behave. One participant explained:

"Who has the right to tell me what to do: vegans? No, I don't think so. Nobody's going to tell me what to do; not what I can and can't eat. It just makes me angry this sort of thing."

During the focus groups, some participants agreed with certain pro-vegan messages but reinforced their desire and intention to continue to eat meat. For example, one female participant explained:

"All the pieces on this table are positive about a vegan diet, it's a good thing. It's not something I would choose to do myself but there's lots of benefits to it."

Participants were familiar with an ethics message in relation to veganism although not necessarily with the detail of the messages in relation to individual species, specific conditions and treatment of animals and so forth. Because of this familiarity some participants expressed a high degree of message fatigue in relation to the ethics theme compared with the health or environmental themes.

“When you’re older you’ve seen it all before. For me, there’s no reaction, well except being angry, so it doesn’t work.”

Participants who used social media, irrespective of age, expressed message fatigue and frustration with veg*n friends who posted pro-veg*n messages particularly on Facebook. Ethical messages that were ‘pushed’ to participants were mentioned as an intrusion in an individual’s personal social media space that caused high levels of annoyance or aggravation. In one group, two female participants discussed how they “flicked straight past” any vegan-related social media posts from their friends. One participant explained:

“I’m just not interested in any of it. So, you’re a vegan. Why do I care about your personal choice?”

There was a strong view expressed in three groups that the ethics arguments were a form of “emotional manipulation” and “emotional blackmail”. In relation to the ethics messages, participants said that they felt “anger”, “annoyed”, “bullied”, “guilty” and that the messages were “hurtful” and designed to create a sense of “shame”. One participant referred to the ethics messages as trying to use “the scare factor”:

“You’re accused, so you feel guilty. But it backfires you see. Don’t tell me it’s all my fault because you just switch me off. You’ve annoyed me and that’s it.”

Participants mentioned frequently that advocacy messages were “exaggerated” and designed to “pull on the heartstrings”. There was a nuanced distinction made by participants who reported that they knew that the images were created to make them feel guilt and shame but that the overriding emotions they experienced were anger, frustration or annoyance. One participant commented:

It’s sad if you think about it. Yeah, but it’s probably exaggerated and they’re just trying to pull on your heartstrings for you to change your diet. I just take it with a grain of salt. You know, you’re taught not to believe everything you see, especially in advertisements, they’re trying to sell something. So, I’m like, yeah, they chose the most pitiful looking pig for this picture. They’re trying to make you feel bad. Like you don’t have compassion unless you’re vegan. It’s just a ridiculous message.

Participants discussed how the images of animals were specifically selected to induce an emotional response. In a discussion about whether the images made the participants feel sympathy, one participant explained:

“If you take the image out and read it you’re going to feel neutral but if you see the sad face then you’re going to feel a little bit sorry for it.”

Another participant pointed out that the ethics messages they were shown only included images of cows and pigs:

“What about fish? There’s no fish here. It’s because fish wouldn’t pull at your heartstrings.”

Some participants likened vegan messages to religious discourse, referring to them as “preachy”. One participant said:

“It’s the same old arguments, seen it all before. It makes me feel angry, they’re trying to get in my head, like a religion. I don’t like others piling things on me.”

Participants also expressed the view that advocacy group messages which used emotional manipulation were completely ineffective:

“I just don’t care. I look at it and nothing. I don’t care.”

“There’s one second of pity then I think, nah. If I go to eat bacon for lunch I won’t even think about this.”

There was a discussion in all focus groups about an infographic with the title ‘Are you a baby eater?’. Some participants expressed anger at the use of the word ‘baby’ which they felt was used as a form of emotional manipulation to induce guilt and shame. One male participant observed that ‘baby’ should be used only in relation to humans, a point of agreement for other participants in that group. In another group, a male participant pointed out that the infographic was humorous because it used the term baby:

“It says baby. It makes you think of human babies straight away so it’s funny, you know, ridiculous, the idea that you’re eating human babies. I laughed when I looked at that one.”

Discussion about the infographic by male participants tended to focus mainly on the use of the word ‘baby’, where the discussion turned to the content of the infographic, female participants expressed a degree of surprise and some said they felt upset that animals used for food had such short lives. Two female participants commented:

“You like to imagine that they’ve had a nice life, don’t you? It’s upsetting that they’re babies. That’s what this tells you and it’s not what you expect.”

“I didn’t know about their natural lifespan. That’s upset me, I’m eating babies that have not lived that long.”

It was generally agreed amongst participants that eating meat was a personal choice and it was up to the individual to decide what and how much they should eat. For this reason, the ethical messages were felt to infringe an individual’s right to choose and were viewed as a criticism of their personally held moral position. In a discussion about children with vegan parents, one group expressed the clear view that the choice to be vegan should only be made as an adult. Children were not capable of making such a choice and therefore it was beholden to adults to ensure that the child ate a non-vegan diet until such times as they could make a reasoned decision to do otherwise. The over 55 group raised concerns about

children with vegan parents and whether those children would get the right nutrients to grow. One participant pointed out that the materials they had been given for the focus group included two statements from the NHS and BDA websites which said that veganism was healthy for all ages. Through discussion the group reached the decision that it was not appropriate to feed children a vegan diet. A female participant summarised the view of the group when she said:

"If people want to be vegan, let them, but for children, no, at least in their growing years let them have a full diet and then if they want to follow the parents, well that's fine."

Many participants identified themselves as self-excluders of some animal products from their diets. Participants had various reasons for excluding that included taste:

"I don't like meat as much as I did but I must admit I don't know if there's a reason for that, I just don't like steak anymore or things like that. I'll eat meat with things but I'm quite happy ordering a vegetarian dish in a restaurant. I haven't got as far as thinking about anything else but I can see the point. I can see why some people would go vegan."

Other participants excluded specific animal products for moral reasons. In three focus groups participants mentioned that they did not eat veal. One participant commented:

"I'll eat anything. I accept that they have to die. Not veal though. Veal makes me think. I don't eat veal"

Another participant discussed her reasons for not eating veal:

"I used to go to my auntie's farm when I was about eleven, well growing up because it was the school holidays and my mother was working and I actually saw the calves being taken away from the mothers. Even at the age of eleven I said I will never ever eat veal and I never have. Hearing those cows, they cried, there's no two ways about it and I said then there's no way I'll eat veal and I haven't, not ever in my life because of that experience."

Two participants mentioned that they no longer ate lamb. One participant explained that she could no longer eat lamb after seeing lambs on a regular basis during walks and, on one occasion, helping to rescue a lamb:

"I am a meat eater. I have to admit that. I'm a bit two-faced, because I love animals. But I won't eat lamb. I'll eat anything else but it's the usual: if I had to kill them I wouldn't eat them but I don't so I do"

In relation to an article about humane milk (message no. 24) a female participant said:

"You see I don't drink cow's milk for that reason. And because I distrust the factory farmers. I think factory farming, well, factory farmed milk, is untrustworthy."

Participants also discussed self-exclusion following food scares, most frequently referring to BSE. One participant explained:

"We used to have tripe. I was brought up eating tripe, my parents brought us up on tripe and I used to quite like it until the trouble started with all the beef and that sort of thing and we've not had it since. You know. But I do have liver."

Barriers

Participants expressed a range of barriers to veganism or meat reduction. Some participants explained that they did not see that changes to their individual practices would have any impact:

"I've seen the videos of how they're raised. They're in tiny spaces and it's sad. It would make me sad, but I don't think it would be enough to stop me eating meat. If I went vegan I wouldn't be making that much of an impact because they're still going to kill the same amount of chickens, whether I go and buy it or not."

"I feel bad for the animals but what can you do? I can't change anything."

"Personally, I feel that I don't kill them. I go to a shop and it's there. So, if I stopped eating meat it's not going to make a difference. Shops are still going to sell it. People are still going to buy it so what's the point?"

One participant explained that he felt it would also be a waste of the animal's death if they did not eat meat:

"It's sad but they've been killed for a reason. So, if no one went to buy it they've been killed for no reason. And if you think about it, that's the way it is."

Participants identified various social barriers that they associated with veganism:

- Availability of vegan food in restaurants
- Awkwardness arising from eating food that was different from that of family, friends or work colleagues in a social situation
- Feeling excluded or being excluded
- Concern about how others will react

Some of these issues were raised during a discussion about whether it was appropriate for children to be raised as vegans. Two female participants commented:

"I think it's about fitting in isn't it. I mean if you go to school and you know you're going to be singled out for being slightly different, it's hard. And then are there adequate things for them to eat out there? I know I'm gluten free and for other people that can be a pain. You go out for the day and oh, you can't go there, you can't do this. I always remember a child when I was in school. When there were sweets going around, she couldn't have a sweet and it just always stuck with me. Very sad. I don't know why I remember that, but I do."

"If you're a child and you're different in any way you're picked on. So, the child should be brought up with all the benefits of a normal diet until they're old enough to make their own decisions. It's not fair to make them different to their friends."

Some participants felt that meat eating was strongly linked to religious tradition. In a discussion about an advocacy message that mentioned Jesus, one participant commented:

“Look at this. How can they say this? They ate meat. In the bible they ate meat. It’s so hypocritical.”

Participants with strong links to areas with an economic reliance on farming were keen to point out that reduced meat consumption would harm their communities. Some participants explained that their community identity was closely tied to “animal farming”. One participant commented:

“I’m from a farming area. All these animals are born and raised to be slaughtered and to be eaten. Yeah, you can say they shouldn’t be kept the way that they are, but they’re here for one purpose in my head. It’s just how it is, normal. It’s how it’s always been where I come from.”

Participants in three groups expressed concern for the livelihoods of farmers. In a discussion about post-war changes to farming, participants in the over 55 group noted in relation to farming that “it’s not how it used to be” and expressed views that farmers were “more distant from the animals now”. Participants commented:

“It’s difficult isn’t it because some of these farming families go back decades and generations and people didn’t have to think about things like this back then.”

“Family farms didn’t produce that much meat then. There was no mention of veganism after the war but then there was no meat around. We didn’t get much meat ever.”

Participants in three groups also noted that “farm animals” were part of traditional countryside scenery and without animal agriculture that landscape might be lost. One participant explained that she got enjoyment from seeing animals in the countryside and another commented:

“If everyone went vegan what would happen to all the animals? I think it would be a sad landscape with no animals in it.”

Participants in two groups noted that celebrities could “afford to become vegan”, that “famous people have someone who can shop for them” and they can “employ someone to cook for them” but this was unrealistic for non-celebrities. A male participant said that he knew that the chicken he ate was the cheapest and therefore probably had the lowest welfare standards, but that price was a key factor in what he chose to eat. In a discussion about cost as a barrier to making dietary changes, one participant suggested it was a “choice between affordability and conscience” and a female participant commented on the issue of “humane milk”:

“I’d want to look into that more. I think it would be easier to switch milk, but I’d be worried about the cost of alternatives. Milk is cheap.”

In addition to cost, it was also felt by some participants that they did not have adequate knowledge to become vegan and that not knowing what they could eat, what to cook, or how to cook, would present a major obstacle to their own dietary changes.

Focus group key findings

- Health messages were seen to have greater credibility than the environmental or ethics messages. Participants indicated that they have already or would in future pass on health information about veganism to a close friend or family member. There was less resistance to the health messages than to the environmental or ethics messages.
- All groups except the over-55 group rated health followed by environmental messages more effective than ethics messages. The over-55 group rated health and ethics messages in front of environmental messages.
- Of the health messages, the NHS website was regarded by a majority of participants as the most trustworthy source of information about veganism and as having the most credible message about vegan diets.
- When veganism was considered in a health context it was discussed by participants as a restrictive or special diet, suitable for an existing condition, and perceived to be difficult to adhere to in the long term.
- The health messages judged most credible were least likely to be encountered compared with the less credible messages which were more likely to be encountered via social media.
- Participants were highly resistant to messages that were perceived to be biased towards veganism from individuals and organisations. Participants were more open to messages that they felt communicated a balanced view.
- Health and academic sources were judged most credible while media and advocacy group messages judged less credible. In the latter cases this was due to widely held views that media and advocacy groups had self-serving agendas while health institutions were perceived to be concerned with the well-being of others and academics considered to have objectivity.
- High levels of cynicism towards celebrity and media generally can impact on the reception of pro-vegan messages. Messages that were assigned to celebrities were judged to have little or no credibility and were not considered trustworthy sources of information about veganism.
- Despite a cynicism towards celebrity generally and low levels of trust in pro-vegan claims by celebrities, the high level of interest in celebrity lifestyles would drive non-vegans to read about celebrity vegans. Despite the complex nature of participants' engagement with celebrity endorsement of veganism, celebrity vegans are useful in normalising veganism within the wider media landscape through simply being identified as vegan as well as through personal narratives that involve being vegan for longer than one year and result in a positive change.
- Perceptions of relationships between muscle, strength and meat consumption remain strongly held across all age groups and especially in males under 25. Participants expressed the view that images of vegan strength athletes and sportspeople challenged general stereotypes and their own views about what vegan bodies 'should' look like. We can speculate that sportspeople, especially those associated with muscularity and strength are important to the normalisation of

veganism and are key to breaking down widely held assumptions about vegan deficiencies and associations with weakness.

- The credibility of claims to being a 'vegan sportsperson' are reliant on length of time as a vegan and improvements to performance. Sportspeople who have been vegan for a year or more are more likely to have credibility than those who have been vegan for less than 12 months and those who have demonstrated improvement after becoming vegan are likely to have even greater credibility.
- Self-excluders across the focus groups tended to regard themselves as highly resistant to pro-vegan messages, felt that they were well informed about animal welfare, and were more likely to hold the strong belief that diet is a personal choice. Self-exclusion of animal products in over-55s was for either health or ethical reasons.
- Those in over-55 age groups who might be regarded as more resistant to pro-vegan messages and less likely to engage with such messages are still likely to self-exclude individual animal products for ethical and health reasons and that self-exclusion will have longevity. In the case of our focus group participants, some had self-excluded animal products for forty years or more. We propose that attachment to food practices in older age groups should therefore not be viewed as a barrier per se. In older age groups where attachment to eating practices is strong and where those practices include self-exclusion of animal products, those practices are likely to remain in the long-term.
- Over 55s are familiar with and receptive to health messages about meat reduction or exclusion, and increased fruit and vegetable consumption. Resistance increased when these were discussed in the context of a pro-vegan message. As over 45s were more likely to consider veganism as a fad or extreme, we can assume that stigma around the term 'vegan' persists in this age group. We speculate that over-45s are more likely to respond favourably to national animal welfare campaigns and mainstream health messages that advice on the benefits of animal product exclusion than to messages that are perceived to be specifically pro-vegan. However, based on the focus group data we assume that where changes are made they will be longer-lasting due to strong attachments to food practices. This may therefore suggest a generally longer transitional pathway to veganism for over 45s but with strong and lasting attachment to incremental changes.
- Participants over 45 were more likely to identify a message from the ethics cluster as credible than participants under 45. This we assume is because these participants were more likely to self-exclude and therefore more likely to identify an ethics message that aligned with their exclusion practices.
- Participants under 25 were more likely to ignore a friend's pro-vegan message on social media but more likely to read a celebrity story that included a pro-vegan message to the end if they already had an interest in that celebrity's life. This reflects tendencies in social media practices to create echo chambers in which individuals are more likely to engage with views and interests that align with their own. Celebrity pro-vegan messages are crucial to normalising veganism for this group.

- Most participants said they would actively avoid films or video of animal cruelty because they considered it too distressing to watch.
- Messages which relate to shared experiences of motherhood between humans and other species are more likely to be positively received by females over 35.
- In the under 45 age groups there was a tendency to reject advocacy campaigns on the basis of a perception of emotional manipulation but not because there was a particular objection to the message itself. Indeed, many of these participants expressed the view that they were concerned about or opposed to farming practices that were detrimental to animal welfare.
- In the under 25 age group avoidance of emotional manipulation and a perceived lack of sophistication in communication strategies by advocacy groups reflected widespread tendencies to ridicule such approaches on social media in the form of memes or social media comments.

Focus group discussion:

Focus group participants demonstrated high levels of scepticism towards pro-vegan messages generally but there were notable differences in participants' readiness to acknowledge pro-vegan claims as credible. According to the message groupings, overall the health messages were seen to have greater credibility than the environmental or ethics messages. Of the health messages, the NHS website was regarded by a majority of participants as the most trustworthy source of information about veganism and as having the most credible message about vegan diets. Other information sources that were considered trustworthy in the health message group included the British Dietetic Association, the Health24 website, *Journal of the Academy of Nutrition and Dietetics*, and Academy of Nutrition and Dietetics.

Participants made clear distinctions between pro-vegan claims and assigned the message to either an individual or an organisational source. If an individual was mentioned in the headline, participants assessed the credibility of that individual to make pro-vegan claims rather than the news source or publication. Where there was no individual mentioned, participants looked for other indicators of authority such as the name of the publication, news source or website. In the case of health claims, health-related organisations ranked highest in terms of trust and credibility even though many participants had little or no familiarity with some of the organisations. For example, while all participants were familiar with the NHS, the BDA was less well known, and no participant expressed familiarity with the Health24 website, Academy of Nutrition and Dietetics or *Journal of the Academy of Nutrition and Dietetics*. When asked to assess the credibility of the health messages, familiarity with these specific organisations was therefore not a major factor and the participants were more likely to judge the validity of the message based on a combination of their prior knowledge, their perception of the organisation's objectivity, and whether it had a professional link to the health sector. While we expected participants to judge the NHS to be trustworthy and credible given the high levels of familiarity with it as an institution, the levels of credibility assigned to other health-based messages from non-familiar organisations aligned with participants' insistence that pro-vegan health messages should be underpinned by evidence and be balanced. For this reason, it is not surprising that the most credible sources were those that were perceived as having scientific or academic objectivity.

The validity that was ascribed to pro-vegan health claims from trusted organisations was overwhelmingly strong within the focus groups. There was less resistance to the health messages than to the environmental or ethics messages. We suggest from the results of these focus groups that non-vegans would be more inclined to trust and receive advice and information about veganism from health professionals than from any other source. This is further supported by participants' comments that they have already or would in future pass on health information about veganism to a close friend or family member. It is important to note however that when veganism was considered in a health context it was primarily discussed by participants as a restrictive or special diet, suitable for an existing condition, and perceived to be difficult to adhere to in the long term. A second issue was that

participants in all groups agreed that it was unlikely that they would see the health messages from these organisations in day to day life and were more likely to see news articles which they judged to be less trustworthy. According to the focus group participants, the health messages judged most credible were least likely to be encountered compared with the less credible messages which were more likely to be encountered via social media.

Participants were highly resistant to messages that were perceived to be biased towards veganism from individuals and organisations. In the case of the BBC, an article included in the health group of messages was judged by two of the four groups to be credible, based on a perception of the BBC as balanced and objective. However, celebrity-based articles undercut the BBC's authority as a credible source in the cluster of environmental messages. In all focus groups, messages that were assigned to celebrities were judged to have little or no credibility and were not considered trustworthy sources of information about veganism. Three groups said that the article featuring Chris Packham had some level of credibility because of his status as a naturalist but no group was willing to go as far as putting the article in the 'credible pile'. The under-25 group had no familiarity with Chris Packham and the article was set aside with no discussion by the participants other than to point out that they did not know who he is. Arnold Schwarzenegger was the only celebrity to be recognised by every participant in our focus groups. Despite being from a BBC news website and the BBC considered the most trusted media source by our participants, the credibility of the article was undermined by the use of an old photograph of Schwarzenegger to accompany a recent article about meat reduction. From this we propose that the high levels of cynicism towards celebrity and media generally can impact on the reception of pro-vegan messages. Moreover, there was a notable relationship between ranking of credibility of a message and the perceived objectivity of the source. Health and academic sources were judged most credible while media and advocacy group messages judged less credible. In the latter cases this was due to widely held views that media and advocacy groups had self-serving agendas while health institutions were perceived to be concerned with the well-being of others and academics considered to have objectivity. However, as it was noted that participants across all groups were more likely to engage with and trust the BBC as a source, pro-vegan messages from the BBC would be more likely to be received and assigned credibility.

The credibility of Schwarzenegger as an advocate for veganism was criticised because participants viewed his muscularity as being linked to meat consumption. In this and other cases where individuals were considered 'muscular' or 'strong' the credibility of a pro-vegan message was doubted. This indicates that perceptions of relationships between muscle, strength and meat consumption remain strongly held across all age groups and was especially notable in males under 25. However, participants in all groups expressed the view that images of vegan strength athletes and sportspeople challenged general stereotypes and their own views about what vegan bodies 'should' look like. From the focus group data we can speculate that sportspeople, especially those associated with muscularity and strength are important to the normalisation of veganism and are key to breaking down widely held assumptions about vegan deficiencies and associations with weakness. It is important to note however that the credibility of claims to being a 'vegan sportsperson' are

reliant on length of time as a vegan and improvements to performance. Sportspeople who have been vegan for a year or more are more likely to have credibility than those who have been vegan for less than 12 months and those who have demonstrated improvement after becoming vegan are likely to have even greater credibility.

The concept of celebrity was treated with a high degree of scepticism by all groups and most participants suggested that celebrities were not credible when it came to pro-vegan messages. This position reflected a high degree of media literacy amongst participants who talked about the need for celebrities to stay in the public eye, that celebrities might make claims about veganism to get attention, and that articles with controversial headlines about celebrity vegans were published by media outlets as 'clickbait'. Apart from the over-55 group, participants in the other three groups agreed that the only articles they would read completely (from beginning to end) would be those that involved celebrities. Despite a cynicism towards celebrity generally and low levels of trust in pro-vegan claims by celebrities, there was a high level of interest in celebrity lifestyles that incorporate veganism that would drive non-vegans to read about celebrity vegans. The results from our focus groups suggest that given the complex nature of participants' engagement with celebrity endorsement of veganism, celebrity vegans could be useful in normalising veganism within the wider media landscape through simply being identified as vegan as well as through personal narratives that involve being vegan for longer than one year and result in a positive change.

In the 18-24 group no participants identified as self-excluders of animal products. Indeed, the greatest sense of disempowerment came from this group. Only participants under 25 expressed the view that any change to their practices would have little or no impact in the wider world. This view was contrasted to that of older participants (over 45), the majority of whom identified as self-excluders. Perhaps most surprising was that in the over-55 focus group every participant claimed to self-exclude at least one animal product from their diet. Self-excluders across the focus groups tended to regard themselves as highly resistant to pro-vegan messages, felt that they were well informed about animal welfare, and were more likely to hold the strong belief that diet is a personal choice. In the case of the over-55 focus group, all participants also identified as practicing Christians with low to no use of social media but high engagement with traditional media. No self-excluders identified their exclusion with a transition to veganism and the reasons for exclusion were either due to taste (dislike of the taste) or on ethical or health grounds. No participants identified environmental reasons for excluding animal products.

The exclusion most frequently mentioned was veal and participants discussed their recollections of campaigns against veal crates in the 1980s and 1990s. It is of note that this campaign had such a lasting impact on focus group participants. Other ethical reasons for exclusions were also related to well-known campaigns, many of which were at their height in the late twentieth century. Participants mentioned campaigns against live exports, battery crates, battery farmed eggs, and, more recently in one case, humane milk as reasons for their animal product exclusions. Where exclusion on ethical grounds was not linked to a specific campaign, the reason for self-exclusion was from personal experience of seeing and

being in close proximity to either lambs and calves. In the case of health, participants mentioned their own or a partner's pre-existing condition, and the BSE crisis as reasons for exclusion. Where participants discussed exclusion due to taste, this was in relation to milk (dislike of the taste) and steak or 'red meat' (less taste or a perceived change in the taste).

It is of interest that the results of the questionnaire suggested that over 45s were less convinced of the health benefits of veganism and had stronger attachments to animal products such as milk. While it is certainly the case that the focus group participants' responses to the message clusters initially confirmed that position, this only tells part of the story. Greater levels of self-exclusion of animal products in older participants reveals an especially complex relationship between practices of animal product exclusion and understanding of veganism. It suggests that those in older age groups who might be regarded as more resistant to pro-vegan messages and less likely to engage with such messages are still likely to self-exclude individual animal products for ethical and health reasons, and crucially that self-exclusion will have longevity. It is worth noting that in the case of our focus group participants, some had self-excluded animal products for forty years or more. We propose that attachment to food practices in older age groups should therefore not be viewed as a barrier per se. In older age groups where attachment to eating practices is strong and where those practices include self-exclusion of animal products, those practices are likely to remain in the long-term.

There was nothing to suggest that older participants in our focus groups would only exclude animal products based on experiences and campaigns that impacted them earlier in their lives. This group were especially familiar with and receptive to health messages about meat reduction or exclusion, and increased fruit and vegetable consumption. Resistance increased when these were discussed in the context of a pro-vegan message. As over 45s were more likely to consider veganism as a fad or extreme, we can assume that stigma around the term 'vegan' persists in this age group. We speculate that over-45s are more likely to respond favourably to national animal welfare campaigns and mainstream health messages that advise on the benefits of animal product exclusion than to messages that are perceived to be specifically pro-vegan. However, based on the focus group data we assume that where changes are made they will be longer-lasting due to strong attachments to food practices. This may therefore suggest a generally longer transitional pathway to veganism for over 45s but with strong and lasting attachment to incremental changes.

Participants under 25 were more likely to find ethics messages funny, humorous or ridiculous and said this was because they perceived them to be designed to play on the emotions. Participants over 35 tended to view ethics messages with a high degree of annoyance and anger because of their perceived emotional manipulation strategies. Participants under 45 had been exposed to a high number of pro-vegan messages via social media. Participants over 35 had been exposed to a high number of animal welfare and advocacy campaign messages. In all age groups there were high levels of message fatigue in relation to ethics messages. The over 55 age focus group exhibited less annoyance at the messages generally and seemed better able to accept and articulate their cognitive dissonance around eating animals than younger participants. A particularly interesting

observation however was that despite an overall resistance to ethics messages, participants over 45 were more likely to identify a message from the ethics cluster as credible than participants under 45. This we assume is because these participants were more likely to self-exclude and therefore more likely to identify an ethics message that aligned with their exclusion practices. Younger participants were more likely to express the view that the images of animals either didn't affect them or affected them very briefly. We propose that in the under 45 age groups there was a tendency to reject advocacy campaigns on the basis of a perception of emotional manipulation but not because there was a particular objection to the message itself. Indeed, many of these participants expressed the view that they were concerned about or opposed to farming practices that were detrimental to animal welfare. In the under 25 age group avoidance of emotional manipulation and a perceived lack of sophistication in communication strategies by advocacy groups reflected widespread tendencies to ridicule such approaches on social media in the form of memes or social media comments. There was also an interesting negotiation of interest in veganism as other's personal choice in this group. Under 25 group participants were more likely to ignore a friend's pro-vegan message on social media but more likely to read a celebrity story that included a pro-vegan message to the end if they already had an interest in that celebrity's life. This reflects tendencies in social media practices to create echo chambers in which individuals are more likely to engage with views and interests that align with their own. This suggests that despite the low levels of credibility assigned to celebrity pro-vegan messages but taking into account the creation of robust social media echo chambers by under 25s, celebrity pro-vegan messages are crucial to normalising veganism for this group.

While advocacy messages were considered crude by younger participants in their attempts to emotionally engage, female participants over the age of 45 were notably emotionally engaged by the 'Are you eating babies?' infographic. Male participants were more inclined to criticise the use of the term baby while female participants engaged with the content and were notably less averse to the use of the term baby and expressed shock and sadness at the content of the infographic. Participants in all groups said they found videos or documentaries about animal ethics issues more affective or hard-hitting than still images but when asked if they would click on the video that accompanied an article about cruelty in slaughterhouses, most participants said they would either not look at it or if they did they would not watch to the end. It was noted that most participants said they would actively avoid films or video of animal cruelty because they considered it too distressing to watch. The focus group data indicates strongly that messages which relate to shared experiences of motherhood between humans and other species are more likely to be positively received by females over 35. Messages about similarity between humans and other species presented in a factual form by an advocacy group tended to be ignored, despite fulfilling the participant's requirement for 'fact' and 'science'. Instead the perceived agenda and lack of objectivity of advocacy groups undercut any factual messaging. However, a more abstracted concept of human animal similitude in relation to motherhood had significantly greater purchase with women over 35.

6. Interviews

Method

This part of the research project involved face-to-face interviews using semi-structured questions. Interviewees were recruited from the earlier questionnaire respondents in addition to purposive sampling to ensure that the required balance of participants who identified as either single or in a couple, vegetarian or omnivore was met. Additional participants were recruited using snowballing sampling.

Ten interviews were conducted with single non-vegans.

Dietary identity	Number of interviewees
Omnivore	5
Flexitarian	1
Vegetarian	3
Pescatarian	1

Twenty interviews were conducted with non-vegan couples:

Dietary identity		Number of couples
Omnivore	Omnivore	9
Omnivore	Vegetarian	2
Pescatarian	Pescatarian	1
Vegetarian	Vegetarian	7
Vegetarian	Pescatarian	1

The interview questions were designed by the research team with input from The Vegan Society. In the case of interviews with single non-vegans there were 6 demographic questions (age, gender, ethnicity, religion, occupation and income) followed by fifteen semi structured questions that explored food shopping habits, influences on food purchase decisions, reason for eating meat and dairy, views of veganism, familiarity with veganism, arguments for and against veganism, conflicts with personal beliefs, animal welfare, health of veganism and health concerns, future changes to consumption practices, purchase of meat or dairy substitutes, provision of vegan food and availability of meat and dairy.

Interviews with non-vegan couples included additional questions about the relationship dynamics that influence cooking, food purchase decisions and the impact of one partner going vegan for one month. Interviewees with children were also asked about the extent to which children influence food purchasing decisions.

All interviews were conducted by the same researcher to ensure consistency in approach. Ethical clearance for the research was approved by Edge Hill University in compliance with its Research Ethics Policy.

All interviewees signed consent forms. The interviews were audio recorded then transcribed. Two researchers analysed the transcribed interviews using thematic and discourse analysis.

Interview results

Single non-vegans

Of the ten single non-vegan participants interviewed for this part of the study five identified as omnivores, three as vegetarian, one as flexitarian and one as pescatarian. When shopping, the most important consideration for most of these participants was cost. Six of the single interviewees had an annual income which was reported to be less than £20,000, two participants had incomes in the £20-30,000 band, and two in the £30-40,000 band. Not surprisingly, concerns about the general cost of food shopping were spread across this group of interviewees. When asked about influences on food shopping choice, a male omnivore (65-74), and the only single non-vegan who identified as a parent, explains that life stage combined with cost has a major impact on food purchasing decisions:

“Well, I’d have to split that because it’s changed over the years. Particularly up to the present. I used to shop for value, in other words money was a concern when I had a family. I had very little- gave very little thought to sustainability and ecological matters. More and more, now, for instance, although I do buy meat, I will only buy meat that is ethically produced where I know the source. The same for fish. I actually eat a lot less meat than I used to. I used to have meat every day, probably about... At least two or three days a week, now there won’t be meat in my diet simply because I now have... I can create better food with a wider variety of things. I’ve got more time.”

Cost, ethical considerations and convenience were issues that many of the other single participants expressed as being entwined. The same participant later in the interview points out that while he agrees that supermarkets should supply more vegan products, he feels that cost and particularly the option for cheap meat can outweigh other considerations when it comes to food purchasing decisions:

*“I’d like to see them selling more responsibly produced products and charging extra for them, charging the extra price for them. Of course, again, they are driven by price. So a lot of people will simply say, “Oh, that’s cheap.”
The sale of cheap chickens, for instance, is wrong as far as I’m concerned. If I was unwaged and struggling to bring up a family of children, then I’m afraid I would go for whatever was cheapest.”*

Thinking about his experience as a parent, the responsibilities of family life and annual income are considered by this interviewee to place limitations on food purchasing options generally as well as limiting a consumer’s ability to make ethical choices. None of the other single interviewees identified themselves as parents but did make links between cost and convenience, particularly in relation to where they shopped. All interviewees reported that they shopped in supermarkets, many reasoning that they considered supermarkets convenient and good value for money. A male interviewee comments:

“Right. I usually go to Aldi. The things that influence my food shopping choices are getting cheap vegetables, being able to cook from scratch, and mainly cooking vegetarian.”

"I like to use some local shops for bits and pieces, but main shopping is probably the supermarket."

Although one participant explained that their options were limited by location to one supermarket, in the main, interviewees spoke about shopping in supermarkets and using non-supermarket outlets less frequently for specific purchases. Alternatives to supermarkets such as local and specialist shops and farm shops were associated with higher cost, higher quality, freshness, and considered better for ethical and environmental reasons. Asked if they buy local for environmental reasons or to support local business, a female respondent replied:

"Well, a bit of both, but it's less likely that they're going to use chemicals and stuff on local produce, home grown stuff. I don't know whether that's me being a bit naive but that's what I believed."

Asked if she trusted local produce more, the interviewee replied, *"Yes, and it's fresher and tastes better."*

A male interviewee explained his preferences for local shops:

"I do like to shop at places where I know they have a conscience themselves. That is difficult to ascertain when you were talking about supermarkets. So I do go to specialist shops like the butchers and there is a cheese shop where I know that they are in love with their product, if you like."

One male interviewee said that he preferred local shops *"because they do fresh fruit and veg"* however another male interviewee noted that freshness was also a barrier to buying local because he sometimes struggled to use everything:

"There's not a consistency but sometimes I'll go through a phase of wanting to buy local, and buying from local grocers and getting a veg box, but that often is dependent of what my emotional capacity is to use all that veg. It can be quite daunting to get a massive box of veg, and then have to use it all up."

A link between supermarket produce and factory farm practices was made by two male interviewees:

"Well, I won't buy supermarket meat, I suspect has been factory farmed. I won't eat any animal that's been tortured during its short life."

"Yes, get rid of crap like that. There are some farms who are very good. They do great stuff for the environment, wildlife and stuff like that, but it's the big industrial ones, as ever, that are just horrendous and cause a lot of harm. So, if you can replace the meat you've got there with meat from a local farm that does good work then so much the better, really."

While greater trust was expressed in non-supermarket outlets and products by some participants, interviewees also talked about time constraints and convenience as key factors influencing their shopping in supermarkets. To address this, some interviewees talked about how they planned their trip and there was, for many, a clear sense of routine in their shopping practices. Shopping routines included planned trips each week or month and habitual purchase decisions. Interviewees described their routines in various ways:

"I buy pretty much the same thing every week."

"I will go to a large supermarket probably once a month, in my car, and buy things like shitloads of soya milk, and heavy things."

"What food I pick when I am at the supermarket depends entirely on how I'm planning my meals for the week. Usually, during the week I try and eat as healthily as possible. As in avoid foods with too much sugar and too much carbs. So I stick to less sugary foods and more protein and more vegetables. That's usually what I think about when I'm shopping for the week."

"Because I started going to the gym like, maybe two years ago, and I started to have this planning of how I eat, and how I do these things."

These different statements about shopping attest to the routine nature of such practices, something that could be considered a barrier given that participants talked about buying the same food items during each shopping trip. Attachment to food practices in terms of buying the same products might result in limiting opportunities for consumers to 'discover' vegan foods while out shopping. Primarily, it was clear from single interviewees that they had distinct patterns of purchasing that were routinely adhered to and within these, 'snack' and 'treat' purchases also tended to be the same each time.

Although they lived alone, some single interviewees spoke about the family dynamics that influenced their food choices outside of their individual homes. When asked about the main reason they ate meat and dairy, a male omnivore explains:

"The main reason that I eat dairy foods has usually been that I've always lived with vegetarians who love cheese. I think I'm a bit of a people pleaser. I buy all of the cheese and cook all of the cheesy things. Since my partner's been living in the States I can't remember the last time I bought any cheese.

I don't, really, remember the last time I bought any meat to cook here either. I think meat consumption is mainly down to my mum. I think she'd properly bollock me, she'd absolutely bollock me, if I didn't eat meat. She wouldn't know what to do. I think it's a weird bonding thing that we have. She's Thai and she's a Thai chef. Food is literally her whole world. I think she gets the most enjoyment out of me eating her food. So she just

would, absolutely, go off it if she couldn't cook me what she wanted to, which is tricky because I see her, pretty much, every week."

A female interviewee who identified as a vegetarian explained how she felt that her vegetarianism was personal and that self-excluding from certain animal products when eating with her family would be impolite:

"I don't want to exclude myself, if they have cooked something for me, then I would eat it but it's not- The reason I don't want to put them off. I feel impolite and I feel also that it's for me to know, not everybody else should know that, what my belief is about health and food."

These comments from single interviewees make clear that the influence of family dynamics on eating practices is extremely strong and that individuals may feel compelled to adopt what they see as familial norms or expectations even when those might conflict with their usual eating practices.

Non-vegans explained that the influence of living with vegetarians and vegans also shaped their eating practices although not to the extent that they adopted them. A male omnivore who lives in multiple occupancy houses explains:

"I think, often, it depends who I'm living with. So I don't think I've ever lived with a meat eater. Not since I lived at home with my dad maybe. So I've always cooked vegetarian or vegan, depending who I've been living with, but, having said that, whenever I eat out I usually eat meat. I eat out quite a lot."

A female pescatarian explains how her eating practices were shaped by an earlier relationship:

"I started being a vegetarian about 30-odd years ago. No, 40 years ago. I forget how old I am. When I had a partner who was, he went microbiotic. Well, it was a long time ago, so I'm struggling to remember this now, but it meant that he not only wouldn't eat anything to do with animals, it was brown rice and miso, and he grew his beard. He did become quite strange, to me, but I respected him."

When asked about their reasons for eating meat and dairy, other interviewees explained that it was because they enjoyed the taste, for convenience, habit, and health reasons:

"Well, I think dairy is because I enjoy it. I tried giving up dairy for a week, and I can, but it's just... For example, cheese. I just enjoy it so much. I just feel like I can't imagine giving it up [...] As for meat, I think that is, again, enjoyment. Maybe for protein purposes. That's mainly it. I don't get really excited about actual meat."

"I like them. I say that... What are the main reasons? Sometimes it's convenient. Especially if you're on the move, on holiday or something. I don't really have any better answers than that." (Laughter)

"It's really hard to manage my diet, because I used to have really bad food allergies, which now are fine, but I also have hypothyroidism and my metabolism goes up and down. When I mess up on medication or it goes up and down, I just- I sometimes don't eat at all, and whatever, and I can really- I think it's more the city life, when I don't have time and I'm working a lot. I mess up my diet and I feel exhausted. When I started to eat meat, I do remember that having a piece of steak, and what it did to my brain and how I felt. I was just like, "Oh, God, I can function.""

"The main reasons I eat dairy products, I suppose because, again, it's just I've grown up with that and I wouldn't know what to eat as an alternative. I do worry about my protein levels because, again, I don't study what I'm eating. I just eat."

As these comments illustrate, reasons for eating meat and dairy are often not distinct but bound up in multiple considerations that reveal the complexity of attachment to food practices. So, for example, interviewees might pair health and habit or taste and convenience, but what is important to acknowledge is that these interviews suggest that it is usual to have more than one reason to continue to eat meat and dairy and that those reasons are benefitting the individual. This suggests that to find pro-vegan messages which resonate with non-vegans it is vital that they are addressed with the personal benefits of veganism rather than those that are perceived to be more distant, for example animal ethics and environmentalism. It is therefore important to consider how interviewees talked about health in relation to their eating practices and views of veganism.

When prompted to think about health and their eating practices, all interviewees responded that they made connections between food and health. Asked whether health is an influence on their purchasing decisions, a female vegetarian replied:

"Sometimes I do consider health. I look at broccoli and I think of health, I look at avocado, I think of health. Whenever I'm in the vegetable section, I think about it and it comes, oh yes, it has better calories. Yes, health is a concern. I feel being vegetarian is a lot linked with my understanding of health, yes. Also, the reason I am vegetarian, I also don't trust the meat. Production of meat. Chicken especially."

When asked whether animal welfare or environmentalism plays a significant role compared to health on purchasing decisions, a female omnivore stated:

"Health mainly. Then I would say environmental and animal welfare on the same level, because I think those two things go hand in hand."

A male omnivore ranks health above animal welfare or environment in the following way:

"It's usually health; my own health. And I'm not very influenced by environmental impact. Sorry, but..."

Asked whether health, environmental impact or animal welfare were more significant influencers, a male omnivore responds: *"Probably health. I just want to live forever."* In response to the same question, an omnivore in the 35-44 age groups notes cost alongside convenience and primarily health as more influential than animal welfare or environment:

“They are very influential, but they’re not the main decision, or the only decision maker. Because I think about everything and then feeling, like, [it’s an] impossible solution, so I’ll just do whatever. Which ends up, actually, then being about, yes, what I can afford, what I have time for and what my health can handle.”

The above comment also illustrates the difficulty that many interviewees felt they experienced when they thought about animal welfare or environmentalism. Interviewees felt that it was often easier not to think about such things, that they could be overwhelming, that they led to feelings of disempowerment, but that health was something that they could think about and have some control over. It is important therefore to consider the extent to which the perception of control and agency factor into decisions where individuals are asked to think about how their eating practices relate to health, animal welfare and environmental issues.

Two interviewees in the 65-74 age category both expressed a view that as they grew older they were more attentive to the relationship between food and health:

“Okay, well there’s quite a list of things there. Health is becoming more important, in my diet, as I get less- as I have more things wrong with me. (Laughter) For instance, I have to be careful now as I have type II diabetes. I do have to be careful about what I eat and drink to a large extent.”

“Well, yes. I mean, obviously, probably in later life I have become more concerned about health issues than I was as a younger person. So, that’s always there [...].”

Although health was ranked by the majority of interviewees as being of greater influence than animal welfare or environment, many also expressed a high level of awareness of environmental issues linked to food. When talking about environmental issues, most interviewees made the link between packaging, plastics and food and there was evidence of a high level of awareness around these issues with some interviewees making direct reference to recent media coverage and David Attenborough as their sources of information about the matter. Only one interviewee mentioned the environmental impact of animal agriculture, and where animals were discussed in relation to food it was primarily around issues of welfare. This suggests generally low levels of popular knowledge about animal agriculture and climate change when compared with the links commonly made between food packaging and environmental issues. It is useful to note here that the wording of the question included a prompt for carbon footprint in relation to environmental impact as well as plastic and locality of production. Interviewees in this study however focused on the packaging issue primarily.

Nine of the ten single interviewees in this study knew someone who was vegan and this impacted directly on how they rated their familiarity with veganism. In reply to the question “To what extent would you say you are familiar with veganism?” three of the vegetarian interviewees responded:

“Yes, I feel really familiar with it, I feel like amongst my social circle it’s probably the- I would err on assuming that someone is vegan. If I was having people round for dinner I would just assume that I was cooking for vegans I think.”

“One of my friends was vegan. We worked together very closely and for about three years I saw her, observed her, dined with her, visited her church, Seventh-day Adventist Church, visited some gatherings in her house. Then I got to know about veganism from her and that was, me becoming vegetarian has somewhat started from there.”

“I think I know it inside out.”

All the single vegetarian interviewees commented that they had at some point tried veganism. When they were asked about their view of veganism, one interviewee who ate dairy for taste and convenience replied:

“I was vegan for quite a while. What’s my general view of it? I think it’s a good thing. And I’m happy to eat a vegan meal.”

Two other vegetarian interviewees responded:

“I really want to be in that gang, but not enough to not feel like I can’t just go and eat what I want if I feel like it. I do think it’s ultimately a really good thing, and I know that the more and more people become vegan the more easy it is for people like me to actually just become vegan. I genuinely believe that if the whole world became vegan overnight we would save the planet. I don’t know if I want to personally deprive myself of these treats when no one else is becoming vegan either. This sounds crazy now I’m saying it, you know when you’ve not really put it into words before? I’m really selfish or something.”

“I think it’s difficult. Maybe I’m unconsciously trying to adopt but I think it is difficult to be absolutely vegan because eggs and butter and milk is part of many products. Unless there is an industrial action or policy change to make food lactose free, dairy free, it’s difficult to become. This is my understanding. Maybe there are ways, but for general public who doesn’t want to spend time thinking and picking stuff from the market, it’s really hard.”

For the single vegetarian interviewees in our study, levels of awareness of veganism were high, all had tried veganism and had vegans in their current or former social circles. What was apparent was that while they all viewed veganism in a generally positive light, they felt that there needed to be some stronger external drivers such as policy change, increased ease during shopping, or a major social shift towards veganism to help them transition to or maintain their vegan practice.

Vegetarian Couples

The second category of interviews were couple interviews with vegetarians. The intention was to interview 10 vegetarian couples. Ultimately, we interviewed 7 vegetarian couples,

one pescatarian couple, one mixed vegetarian/pescatarian couple and one mixed vegetarian/omnivore couple. Since vegetarians are in theory closer to being vegan it is interesting to investigate in more detail their orientation to veganism and how, for example, relationship and familial dynamics may shape that.

Although a study wholly dedicated to exploring couples in terms of differing dietary choices (vegans and non-vegans for example) would be merited, our interview sample included just two such examples of a 'mixed relationship'. A larger study wholly focussed on vegetarian constructions of veganism would also be worthwhile.

In this section we go through the main features of the 10 couples and draw together themes at the end. With the first couple both (heterosexual) partners were aged 55-64 and the female was vegetarian, and male omnivore. The broader family here was also relevant since they had a vegetarian daughter and a vegan daughter-in-law. Both partners reported taking equal responsibility for cooking. In this relationship the omnivore partner ultimately ate more vegetarian and vegan food than is likely typical. As he exclaims during the interview,

"there's no rules to say that I can't eat vegetarian or vegan food, you know?"

This view serves to minimise distance between omnivores and veg*ans and expresses an openness from the omnivore's perspective. The couple were later asked,

Imagine that one of you wanted to try going vegan for a month. How would you feel and what impact do you think that would have on the other person, or on the relationship?

Female vegetarian partner:

"Honestly, I don't think it would. I mean, if you're talking about a month, there might be tetchy moments perhaps. I know that if I decided to go vegan for a month, I'd be totally supported in that, and that you pretty much eat whatever I put in front of you, because I know my way around vegan food, but I can't speak for you"

Male omnivore partner:

"Well, I think I'd have to adapt to what I cooked, rather than what I ate, and I think this idea that I would eat what you put in front of me is probably about right. I wouldn't necessarily have the meal repertoire, in the same way as I didn't years ago, whereas I have now. I don't think there'd be an issue between us about it".

A phrase such as 'you pretty much eat whatever I put in front of you' conveys aspects of the food relations at play here, and overall this couple predict a lack of conflict over a potential transition, further reinforced by the male partner's view of adaptation. Asked later how things would be if the transition was permanent, both respond that they would get used to it. They also report mostly eating the same meals together, rather than separating to accommodate each other's food identity. This would imply that the male omnivore is eating

vegetarian often. Indeed, he reveals an interesting response when asked the following question:

What are the main reasons you would say that you eat meat and/or dairy foods?

Male omnivore partner:

“The main reason for me was that I was brought up that way and I like it. I may be spiritually vegan and, certainly, if I had to catch or kill or prepare my own, I would probably be even more vegan. So, you know, I’m a complete hypocrite in that respect. Sorry, I was trying to think of a better word, but there isn’t one”.

This degree of self-reflection re-occurs in later interviews, especially with omnivores. Overall both partners here are positive toward veganism. The female vegetarian demonstrates how her view of veganism has shifted:

“I think veganism, it used to feel that it was, kind of, like, a very austere version of vegetarianism, whereas I now know that it really is not true. It just isn’t”,

and a little later she discusses the influence of a vegan relation:

“I think having a vegan relative made me concentrate more. It made me look for things more, and think about, “Well, if she’s coming over, what can I give her?” because that’s what I always do. People come over, and you think, what are you going to...”.

Both partners refer to their meat and dairy consumption as “naturally declining” and that they expect it to “continue to do so”, implying that, whilst they are not necessarily on a planned pathway toward veganism, they expect to continue reducing.

The all pescatarian couple (heterosexual, female aged 45-54, male aged 54-64) interviewed were former vegetarians who now added some fish into their diet. This dietary shift was explained in terms of perceived health benefits and only occurred two months prior to the interview. They had one vegan daughter who they described as giving them a “*bit of a nudge*” on animal welfare issues. Moreover, it was their daughter who had originally been the main influence on them becoming vegetarian. This was because to begin with they were cooking separate meals to accommodate her and then decided it was more practical for them all to be vegetarian. The female partner explained further,

“We loved it and it opened up a world of different food to us, actually we were wowed by it weren’t we? So, we carried on”.

Both are positive about veganism, viewing the strongest arguments against the practice as choice and cost. Asked how they felt about the animal ethics argument for veganism they responded:

Male pescatarian: *“I think it is a very strong one”.*

Female: pescatarian: *“I do. We kind of feel, yes, they’ve got a strong argument, but we still aren’t vegan, kind of a little bit guilty there. It is a strong argument”.*

In spite of this agreement, neither envisaged changing their diet again in the future.

The first wholly vegetarian couple’s (heterosexual, female aged 18-24, male aged 25-34) food dynamics were shaped by one partner (the male) doing all the cooking. For example, when the female partner is asked,

Imagine that one of you wanted to try going vegan for a month. How would you feel and what impact do you think that would have on the other person, or on the relationship?

She responds that,

“I guess we have, in a way, spoken about me being interested in it but that’s not really feasible unless I can cook, because it would mean looking at everything, completely changing and doing separate food”.

This underlines the importance in thinking about the division of labour in relation to food preparation and how that can shape potential pathways to transition. If both people in a relationship are competent cooks it is likely to improve the chances of changes and innovations being made to everyday food repertoires. They define their adherence to vegetarianism in terms of food taste and convenience. When asked,

What is your general view of veganism?

The male vegetarian responded,

“I mean, fairly positive. Certainly, I feel quite conscious that not being vegan- it’s not because of any ill-feeling towards it, it’s something I respect quite a lot. It’s just quite selfish, to do with enjoyment really which isn’t great, but... (Laughter)”.

The female vegetarian adds some further considerations:

“I think it comes across as more of an expensive change, but also you have to be on it with checking all your food and everything. Overall, really positive”.

As in the single interviews this highlights concern about cost, and the perceived inconvenience of ingredient checking as potential blocks to vegan transition. In talking with vegetarians about how they construct veganism – especially in light of the growing social profile of veganism – an important area of focus is also how it is perceived the two practices differ ethically. In an attempt to place interviewees in the position of a vegan advocate, all were asked the following question:

What would you say is the single strongest argument for veganism to you personally?

In this case the male vegetarian responded,

“For me, as a vegetarian, on ethical grounds it’s taking that to its logical conclusion really. I know that the dairy industry is just as harmful. It’s a perception thing because it’s easy for people to separate meat from animals, but it’s easier to separate animal products from the animal”.

This response in a sense acknowledges a view of ethical limitations in vegetarianism but conveys that when one is not eating meat it’s also simpler to forget that you are consuming animal products. A key question for vegan advocates is to better understand how people can hold this ethical awareness but not transition to veganism. In the case of this male vegetarian he explained it in terms of it being hard to break habits. In the case of this couple the woman was surer that she would gradually transition to a vegan diet. However, both partners were positively disposed toward veganism.

The next vegetarian couple (heterosexual, both aged 25-34) raise an issue which also emerged during the questionnaire phase of this project. When discussing the possibility of going vegan for a month, the female vegetarian discusses a previous health condition as potentially mitigating against that.

“I am interested in veganism, but restricting my food any further in that way, because I have had disordered eating, I find quite cluttering for my mind”.

Although there are arguments against viewing veganism as restrictive (because it often also entails an expansive consideration of new foods not previously consumed), the point here, for someone with an eating disorder history, is that it could be constructed in this way, and that this construction could make it emotionally difficult or too overwhelming to envisage. Whether eating disorders specifically, or other previous or continuing health conditions, this could be an important area of further consideration for vegan advocates.

In common with several of the vegetarians interviewed this couple had already decided to eliminate some other non-meat animal products, in this case, not having dairy milk in the house and only consuming it very rarely. It could be important to consider the lived gradations that exist between vegetarianism and veganism. For some vegetarians these will be proto-practices toward vegan transition, for others these will be a particular way in which they practice vegetarianism which holds meaning for them personally. A further interesting observation is made by the female vegetarian in this couple in relation to how the rise of veganism has made vegetarianism easier, improving the choice and accessibility of appropriate foods. She also implies that veganism has taken some of the cultural judgment away from vegetarians, saying *“vegans get picked on instead (laughter)”*.

The next vegetarian couple (heterosexual, both aged 25-34) reported making more vegan foods, although they were quite habituated to using cheese and to an extent eggs (which they put down to protein and liking the taste). Nevertheless, they had replaced some animal products and were already using plant-based milks. They thus constitute another example

of the gradations taking place within the space between vegan and vegetarian food identities. Furthermore, socially the couple reported knowing “quite a lot of vegans” and when eating out the female partner would, in fact, choose the vegan option over the vegetarian option but had not quite got to the point where she would make vegan meals at home. In some respects, this couple were being influenced by the vegan social environment around them but would not necessarily be continuing along a pathway to veganism due to particular animal product attachments and some expressed uncertainties over nutrition and “limiting their diet further”.

The next vegetarian couple (heterosexual, both aged 55-64) were also consuming plant milks (and plant yoghurts) outlining that “if we cut out eggs, cheese and chocolate we’d be vegan”. The male partner was closer to veganism, but the female vegetarian was more attached to animal products, also including butter. The male partner would regularly have “vegan weeks”, with the female partner saying, “I think were I young now I would be vegan no question, but we kind of got settled...set in our ways”, further outlining that when they became vegetarian the animal ethics dimensions of egg and dairy production were not widely discussed, and that, culturally eggs and milk were strongly believed to be healthy, recounting slogans such as “you go to work on an egg”. She no longer believed them to be healthy, but still consumed them. When pondering at the end of the interview whether she may become vegan in the future, she expressed

“As an individual, I would really like to be vegan. Whether I’ll ever reach that stage I don’t know, but I would really like to. It’s finding the motivation. And we shouldn’t really need the motivation, it should be a given that anybody with a brain, anybody with any empathy towards animals should be vegan”.

This is a noticeably strong statement. Overall the couple were both very affirmative of veganism. The main reason behind them not being vegan, according to the female partner, was an explanation in terms of age and being set in their ways. They did not report having vegan friends and it is possible that such a social dimension would enhance the likelihood of them reducing animal products further or becoming vegan.

The next vegetarian couple (heterosexual, both aged 25-34) had a four-month-old baby and expressed an intention to become vegan in the future. The relationship dynamics of how that transition might take place are conveyed in answer to the following question,

Imagine that one of you wanted to try going vegan for a month. How would you feel and what impact do you think that would have on the other person, or on the relationship?

“I think if one of us was going to do it, I think (he) would be the first to go full vegan because I really like butter. (He) is really good with just accepting the substitutes, whereas I’m very much like, “No, it’s not the same.” I think... he would be the one that would go vegan. I would be fine with it. I think I would probably end up eating a lot more vegan stuff because he was vegan. I think eventually I would just probably go vegan because it would be easier”.

Although on occasion both vegetarians may decide to transition together, this example highlights the way in which the impetus may also come from one person in the relationship. Whilst this could also provoke tension or resistance from the other, in this case it is envisaged that the second person would follow suit. As things stand in this relationship the male partner is close to eating vegan already and speaks of “chocolate and cheese” as the only things he eats which are not vegan. In contrast the female partner is open to her reasons why, at the moment, she remains vegetarian, in response to the following question,

What would you say are the main reasons that you eat dairy foods?

“Honestly, for me, very honestly, I've not got to the right point where I feel like I can give them up because I've eaten them all my life. It's not like meat where I was always kind of a bit grossed out by it, I've always enjoyed cheese and butter and milk. It's harder to give something up that you've enjoyed your whole life. But saying that, I do want to and do feel like I really should. That's my honest answer to what's holding me back, it's just that I currently still enjoy it”.

The male partner adds an additional perspective in response to the same question,

“I think for me, a big part is probably convenience. I think going veggie was easy. There is a lot of veggie options, although you're a bit more limited. It was quite easy. Going vegan, there have been situations I've been in where it would have been really tricky. I travel with work a lot and a lot of the time you don't know what the food situation is going to be where you get to”.

Although there is an intention in this couple to become vegan in the future, factors of enjoyment (taste) and convenience have, to date, prevented transition from taking place. They later describe themselves as “vegan adjacent” and “vegan-ish”, saying they are waiting for the right time, for them, to change. In common with other vegetarian couples (not all as we have seen) they describe having many vegan friends. This becomes clear in response, by the female partner, to the following question,

To what extent would you say you're familiar with veganism?

“(to a) pretty huge extent I think. A lot of our friends are vegan. A lot of the community that we hang around within is vegan. It just seems to be everywhere as well now. Even outside of our little bubble of political punks, mums that I talk to at mum groups, some of them are just casually vegan and I would never have expected it. It's definitely becoming more out in the open”.

The male partner adds,

“My mum and sisters are all veggie. I've grown up in a veggie household with vegan aunt and uncle and things like that. Again, I've known about vegetarianism or veganism for a long time”.

Clearly both partners are very familiar with veganism and that has likely shaped their preparedness to eventually transition. One further factor delaying that was in relation to breastfeeding her baby. The female partner preferred to wait until after the breastfeeding period had come to an end due to not wanting to introduce “*a sudden change*” to what she was feeding her baby.

The next vegetarian couple (heterosexual, both aged 25-34) were a further example who had started to reflect and change aspects of their animal product consumption. Whilst on the one hand the female partner was “a big fan of eggs” she had become ethically troubled by her own consumption of cow’s milk,

“I got upset about milk, so basically started replacing loads of things that I have with milk in. So I have soy milk instead of milk and things like that. Because I think with that one, we were just thinking of trying to be more vegan. So when we see things that are vegan only, we do try to collect them up..... Because I was looking into ethical milk and there’s just no such thing. I was like, “Can you get free range cows that just get milked when they feel like it?” It was like, “No, you can’t.” So with that one, it’s just a case of moving slowly towards...”

The male partner concurs, but adds a disclaimer about tea,

“Yes. Definitely over the last couple of years, we’ve cut down on our dairy consumption.. I still have cow’s milk in tea. I just don’t really get on with plant milk in tea and tea is an important thing to me”.

Tea then is part of his daily food routine and as things stand having cow’s milk in it is something he finds hard to replace. This sounds like a small detail of diet overall, but these sorts of routines are important parts of daily eating practices and could act against reduction or transition. Elsewhere he reports replacing cheese with nutritional yeast on pasta. Again, this is a vegetarian couple who have discussed amongst themselves the possibility of going vegan. This arose again in response to the following question,

Imagine that one of you wanted to try going vegan for a month. How would you feel and what impact do you think that would have on the other person, or on the relationship?

“If one of us went vegan, then we’d both do it, because we’re vegetarians, but I think we’re both in agreement that the best way to live is to be vegan. So we have been thinking about it. But if one of us just really went for it, then especially, I mean, you have to do the cooking, so...” (female partner).

“Yes. Moving from vegetarianism to veganism is something we’ve discussed quite a lot over the last couple of years. As I was saying earlier, we’ve some cutting back steps at this point” (male partner).

Once more this couple have vegans in their social and family network, and, in spite of some commitments to animal products (eggs and cow's milk in tea), appeared open and interested in a future vegan transition.

The penultimate couple in this section, who were both vegetarian (heterosexual, both aged 45-54) had two vegan daughters and a vegetarian son. The male partner also grew up as a butcher's son and in his 20s had become uncomfortable with eating meat. In this relationship the male partner was more enthusiastic about veganism, having previously done the Veganuary monthly pledge. The female partner was initially more cautious in terms of the social impact of going out with friends and feeling awkward.

The couple talked about being more likely to go vegan when their vegetarian son leaves home in the future. Whilst they had influenced their children bringing them up vegetarian, their two vegan daughters were now influencing them to reduce animal products and move towards eating vegan. As the male partner outlined,

"I think they've influenced me. I think (one daughter) going vegan three or four years ago, or whatever it was, has very much influenced me. To the point that I've had these months and times when I've been entirely vegan and where I'm mostly vegan most of the time. I think that is because of her".

This couple had also reflected upon the ethical dimensions of vegetarianism vis-à-vis veganism, as the female partner later explained,

"I think being vegetarian is not taking into account the whole dairy industry, which is very problematic, isn't it? It seems a little bit illogical really to be vegetarian and not vegan.... That's why your children influence you so much because they take it all on now. They educate us about it, don't they? Which is really important. About lots of things".

At the end of the interview the female partner described her transition to veganism as inevitable. In fact, she concludes by saying, *"That's it now, I'm vegan. I said it would happen after tonight"*. Though we have no way of knowing whether the extra reflection prompted by the interaction of the interview entailed a lasting transition, we can at least say that this couple constituted a further example of pro-vegan vegetarianism and were at least likely to be on a pathway to becoming vegan.

The final 'vegetarian' couple interviewed (heterosexual, male partner aged 35-44, female aged 45-54) for this project were more accurately a vegetarian male and pescatarian female, the latter explaining that she ate fish fingers. The male partner had a vegan daughter from a previous relationship. The female partner was also coeliac which influenced her diet. Once more this couple were reducing their animal product consumption and reflecting upon what were seen as ethical limitations of vegetarianism. As the male partner recounts when asked about his general view of veganism,

"I think it's a good thing to aim for. Definitely cutting down on consumption of dairy and eggs, I think, is the way forward... I used to just go along, thinking that if you weren't

killing the animals it wasn't going to do them any harm. I mean in an ideal world that could be true, but it's the factory conditions of everything and you're contributing to that".

The familial influence was also clear with the female partner saying that vegan family members of her partner had educated her. Being coeliac for the female partner raised health concerns in relation to achieving adequate nutrition were she to be vegan. She also expressed some concerns over the cost of vegan food. Both were in favour of continuing to reduce animal product consumption.

Certain themes emerge from these ten interviews, some of which were present in other areas of the project. The interaction of previous or pre-existing health conditions (also seen in the questionnaire section) were present here and can be seen as introducing uncertainty over the possibility of vegan transition. Amongst these vegetarians there was a detailed depth of reflection on the ethical dimensions of veg*ism. Several vegetarians spoke in detail of what they saw about the ethical limitations of their own vegetarian diet. This underlines the importance of turning to other explanations of why, despite such critical awareness, vegan transition had not occurred. Perceptions of cost and convenience, and taste commitments to animal products were reported here as potential blocks to vegan transition. These could be important even in the presence of critical awareness. The interviews also highlighted the importance of social dynamics in the relationship as shaping diet. For example, one partner may be more pro-vegan than the other, and it may then become important if one partner in the relationship takes more responsibility for cooking and/or shopping. Thinking the social more broadly we also saw examples of vegan children and other family members being important, as well as a broader vegan social environment increasingly bringing the questions of veganism into the spaces and reflections of vegetarians. The vegetarians in this sample are increasingly practising a form of vegetarianism which is being 'pulled toward veganism' and involves removing certain non-meat animal products. Recognising these gradations of eating practice in more detail may be important for strategies to assist vegan transition focused specifically on vegetarians.

Omnivore Couples

The third category of interviews were couple interviews with omnivores. In this section we interviewed nine omnivore couple and one vegetarian/omnivore couple. Similar to the vegetarian couples section above, in this section we go through the main features of the 10 couples and draw together themes at the end.

The first couple (female 55-64 and male 55-64) had family members who are vegans. When talking about who takes the lead when it comes to food purchasing decisions, the female interviewee explained that the range of foods purchased must accommodate various dietary requirements:

"The other thing of course, is we have vegans in the family. We have somebody with coeliac disease in the family. We have large food choices, because what we can eat they

don't necessarily eat, so we tend to buy, and probably waste, I have to say, more food, because we are buying in just in case."

The couple explained that because family members might call in at any time, they feel it is important to be able to have a variety of foods in the household. The female interviewee describes the staples of the food shopping as things that her partner would want for breakfast, specifically:

"I have things in my head that I know he likes. He likes bagels, and he likes bread with seeds in, and blueberries on his porridge, and he likes to have porridge for breakfast. It's all those sorts of things, so I always know, so I keep an eye on what we are running out of. I top those up, because I know those are staples for him that he likes to have."

During the interview food was assigned to different family members and while the breakfast staples could, in theory, be vegan they are dissociated from the discussion of what are regarded as distinctly vegan foods later in the interview. A little later the female interviewee described other food staples that include "packs of chicken", "lean mince" and "a roasting chicken" again assigning particular foods to the individual tastes or dietary requirements of individual family members. In this case, there was an openness to buying and cooking vegan food, influenced by familial dynamics and the informal nature of family visits. It implies that family visits often included having a meal together which for this omnivore couple means that buying vegan food has become part of their regular shopping.

The couple discuss the reasons for their preference for British foods. The female interviewee explained:

"We favour British foods. We tend to go to places that sell British foods. I would rather eat British foods than have things that are imported from somewhere else. I think we have enough of our own fantastic produce as far as apples and things like that are concerned, and home-grown fruits and veg. I don't see why we should get them from Ecuador or wherever. I hate the waste of it all."

The male interviewee says "For example, I wouldn't buy halal meat. But you don't always know the provenance exactly. There is very limited information". The female interviewee continued:

*"I always buy British meat, because at least I feel that it's actually, mostly, you know, humanely slaughtered. Well, if you can have humanely slaughtered, but you know. But we were brought up to eat meat. It's part of our diet, and we need it for our nerves' health and stuff. I like it.
But we don't have as much red meat as we used to. We'll have a treat, a piece of steak as a treat, but it will be a good quality piece rather than, you know. We eat skirt, don't we? We make that into good quality meals, don't we? We do a lot of home cooking. We don't buy processed foods. Everything that's made in the house is fresh, isn't it? We've always eaten our own cooking, done our own cooking."*

During the conversation about the purchase of British food the couple described how their practices support local business, where they consider environmental and animal welfare concerns and how they prioritise quality. The reasons for eating meat combine normalisation of practice (“But we were brought up to eat meat. It’s part of our diet”) with perceived health benefits and needs (“we need it for our nerves’ health and stuff”) and taste preference (“I like it”). The couple also however note their reduction in red meat and later explain that part of the reason for this is health. It is interesting to note that in this and other interviews, meat is associated with health, with being unhealthy (usually in relation to levels of consumption) and regarded as a treat that reframes the restriction for health reasons in a positive sense. The conversation between the interviewees and the interviewer revealed the changing meanings attached to meat.

Interviewer: *You’ve said you’ll have red meat as a treat. Again, is that to do with health, to have as a treat because it’s unhealthy? Or because it’s expensive?*

Male interviewee: *It’s partly health. People mustn’t eat too much of the stuff. The trouble is you start to be able to afford it more, so the tendency might be to eat it every day.*

Interviewer: *Yes.*

Male interviewee: *Whereas if you went back to our youth, you could afford it, well, traditionally you had it once a week, and then you could afford it twice, and then obviously if you really wanted to you could probably afford it every day. But it’s not a good idea.*

Interviewer: *It’s kind of always been a treat, but now you have to kind of make sure it is a treat.*

Male interviewee: *It’s a rationed treat.*

Female interviewee: *A rationed treat.*

During this conversation, the normalisation of meat, in other words the tradition of eating meat, was acknowledged as having changed. A return to the norms of ‘once a week’ are reconceived not as restriction per se but as ‘a rationed treat’ for reasons of health. At the same time there is an acknowledgement that there is an unhealthy aspect of meat consumption that requires restriction when cost no longer becomes a constraint. Meat is reconceptualised as a special treat and controlled through personal responsibility. During the interview the couple mention frequently the need to reduce meat consumption in relation to their own practices and in society generally, however they are also clear that reduction would not transition to full elimination of meat from their diet.

When asked how they would feel if one of them went vegan, both interviewees noted that they could not imagine going vegan permanently. The male interviewee said: *“I think I’d just*

get a bit bored after a while.” In a conversation that reiterates the attachments to meat as normal, as a taste preference and as the special luxury, the female interviewee also mentions boredom as an issue:

“I mean bean chilli con carnie is really nice. I’ve made it in the past, but yes, I think the expression is too long in the tooth. We are used to our meat I suppose. There is nothing I like more than a decent piece of fillet as a treat. We don’t do it all the time. As I said, we don’t choose to eat meat all the time, so we do have at least vegetarian stuff. We don’t eat a huge amount of eggs or dairy things particularly, but yes, I don’t know. We’d have to negotiate that one. I think it would get boring.”

When asked about the arguments for and against veganism, responses to both questions prioritise the reason of health. The female interviewee discussed a vegan family member developing a nutritional deficiency and both partners state that they do not see that there is a strong argument for veganism but that instead that there is a strong health reason to reduce meat. It is of note that this couple also mentioned the environmental impact of animal agriculture as a reason for reducing meat although the health reasons for reduction are considered more compelling. The male interviewee says:

“Yes. As I say, I don’t think it’s for veganism per se. There is certainly an argument for reducing meat intake, at least from the point of view of a diet in this country, where it is easy to eat too much, now anyway. Certainly, a health one. Probably there is an environmental one.”

In the discussion about arguments against veganism, health again is regarded as the primary issue. The female interviewee points out that it is difficult to get the right amount of protein from beans and lentils compared with meat, which is referred to as “first class proteins”, and both interviewees express concerns about children being brought up vegan. When asked **“Do you consider veganism to be a healthy diet?”** the interviewees respond in the following way:

Female interviewee: *No.*
Male interviewee: *Not without a lot of effort.*
Female interviewee: *Not without a lot of effort, yes.*
Male interviewee: *It would be easy to have a very unhealthy vegan diet.*
Female interviewee: *It would be very easy to have a very unhealthy vegan diet.*
Male interviewee: *Quite hard to have a fully healthy one. Quite hard, if not impossible.*

Throughout the interview there was a negotiation of how health relates to veganism and meat consumption. During the conversation, meat is referred to as both healthy and unhealthy, veganism is considered healthy (although difficult) and later unhealthy. The notion of meat reduction is conceptualised as both a treat and a return to a previously experienced moderation of consumption controlled by cost. In this sense, cost is seen as being an inhibitor of meat consumption that has benefits for health. These views could be important to the normalisation of price increases or increased tax levies on meat. It is likely

that working class people under the age of 35 consider cheap meat to be normal having not experienced earlier cost restrictions on daily meat consumption as typical. Where the discourse on meat reduction for health has purchase, the views of people over 55 that regard previous cost inhibition as having benefits might therefore be important in gathering public support for price increases on meat in future. It is also important to note that there is an important loosening of the attachment of health meanings to meat. It is significant that as the meanings of meat become more divergent in relation to health, the positive associations between vegetables and good health remain robust.

The second couple (male 56-64 and female 45- 54) were both omnivores trying to avoid eating meat. In this interview, the female interviewee has the main responsibility for shopping and cooking and comments early in the interview that whenever she makes a curry she always uses a meat substitute. Both interviewees agreed that they enjoyed it, but the female respondent was not sure why she used a meat replacement for that meal only. Similar to couple 1, this couple also had family members who were vegetarian and vegan. In this case, the couple expressed that mixed dietary requirements were the cause of considerable stress during Christmas. The female interviewee explained:

"In fact, at Christmas, sometimes, I just have a meltdown in Tesco, don't I? Because I have vegetarians, vegans and meat eaters. It's just like, "Oh." Christmas gets too much for me. I just have a meltdown."

Apart from a large family occasion, both interviewees agree that it is easier to be vegetarian or vegan now than previously. Because they had a vegan family member both have eaten vegan food in restaurants and say that it is enjoyable. They also noted later in the interview that when vegan family members visit, and it is not a special occasion they feel that they are able to make one vegan meal for everyone. The female interviewee noted: "we do try to make one big vegan meal that everyone can eat, rather than make four different meals. And I do enjoy them. I do." The family member has also changed their view that veganism is expensive. The female interviewee explained:

"Yes, you do. I think sometimes, my daughter, [...], if she comes shopping with us, she'll say, "Get this. This is cheaper." But when I go shopping for [...], who's a vegan, I buy all the expensive stuff, because I'm looking for the sign that says, 'Vegan,' so it costs twice as much. But I really don't need to do that. You just don't realise. So I think, sometimes, being a vegan, it costs twice as much, doesn't it?"

[Daughter] she'll say, "You just get the no-frills garlic bread or whatever, because that's vegan." But I didn't know, so I've been getting the most expensive one, because it had 'vegan' written on it."

Both interviewees agreed that it would be easy to be vegan for a month because they have had previous experience shopping, cooking for and eating with vegan family members. Responding to questions about arguments for and against veganism, both interviewees mentioned health as an argument for veganism noting that the vegans they know are

healthy. When asked if they would have health concerns about going vegan, both responded that they would not, and the male interviewee noted that at their life stage it could even be beneficial for their health. When asked about the reasons for eating meat and dairy, the male interviewee said that it is a taste preference and habit. Although they both regard their knowledge of veganism as high, they nonetheless expressed a concern that initially veganism would require a lot of planning to maintain as a dietary choice.

The third couple in the omnivore group were female (55-64) and male (65-74). The female interviewee had tried to be pescatarian but explained:

"I mean I try to be pescatarian for a long time but I found it difficult living with [male interviewee] to have two separate meals all the time. We now have chicken, don't we, from time to time?"

The male interviewee explained he developed an increased interest in food when he had to take over responsibility for the shopping while the female interviewee had been recovering from an injury. The male interviewee spoke about his increased awareness of the relationship between food and health, particularly in relation to sugar, fat and salt. They both noted that because of this awareness they had increased their fruit and vegetable intake and reduced their red meat consumption to once a month.

Food labelling was increasingly important to this couple who shopped at Marks and Spencer because they felt that the labelling was better than in other food retail outlets. Food quality, health and the environmental impact of packaging were the couple's main priorities when making purchasing decisions. The female participant explained:

"I hate the plastics and the excess use of wrap on wrap on wrap. We notice the difference when we're, for example, in Majorca or when we were in the Algarve it was even more noticeable. Chicken looks a different colour. It's hung up. Everything is paper packed, by and large, isn't it? It just seems more knowledgeable about how you might live your life. Products are much more tactilely available, aren't they, because they're not plasticised everywhere. You've got your own selection of- I know you can to some extent in Marks. But that sense of food being as if it was more of a grocers, even when you're in a supermarket. Particularly some supermarkets out there are very good at being grocery and I like that."

The couple spoke about their self-exclusion practices which included bacon:

Female interviewee: "Now he's found out that bacon is bad for you, you don't have it very often."

Male interviewee: "I've even stopped the kids having it. They used to love that when they came up."

Female interviewee: "It's bad for them, especially because their dad had bowel cancer. I'm saying, "You're giving them bacon sandwiches as a treat every time they come up," We don't do that anymore."

They also noted a reduction in red meat from three times per week to once per month. When asked why they eat meat and dairy the male participant says, “that's where we get our protein from”, the female participant responds, “I would say it's ease of access.” During the interview it transpired that the female participant would not eat meat if her circumstances were different:

“If I was on my own, I would eat I think even more grain and vegetables. I'd probably still have a mainstay of dairy to supplement the protein but I probably wouldn't eat meat at all. Would I eat fish? Probably not at all, no. But I now understand dairy is like the pits, keeping cows permanently lactating and things, I didn't realise.”

Towards the end of the interview, when asked if they intended to reduce levels of meat and dairy consumption in the future, the male interviewee responds that they are doing that and adds that he is doing it for health reasons. The female interviewee said:

“Well no, for me it's on environmental and other grounds but I think that's assuming we're a couple, which I hope we are, until we drop our clogs together on a lovely holiday or whatever. But yes, if I ate separately to you, I think I'd probably eat even less meat and stuff. But I still enjoy it. No, we would naturally start to do that and are.”

This couple talked openly throughout the interview about their different attachments to food and that the male participant is interested in health while the female interviewee feels that animal welfare and environmental concerns are of greater importance to her. While they expressed differences, they have negotiated a gradual reduction of meat and dairy finding common ground in the act of reduction and some self-exclusions (bacon) although the female participant does express a desire to eliminate, at least, meat from her diet.

The fourth couple were female (35-44) and male (25-34) and described themselves as omnivore with the female interviewee adding that they are “*aspirationally vegetarian*”. This is qualified later in terms of purchasing decisions where the female interviewee noted that:

“most of what we buy in our online food orders is vegetarian. I don't remember the last time we bought something on the food order that wasn't.”

The male participant explains that they did not find vegetarianism suited their lifestyle which often relied on ready meals due to work pressures.

“The vegetarian options that they have, (a), aren't very good, and, (b), they're generally really unhealthy, because they're generally like, “Let's put all of the cheese in,” or whatever. I do like cheese. That's fine, but it's when it's 40% saturated fat or whatever, whereas the meat options are, in terms of their nutritional value, actually a lot healthier. It's just like, “You're not really giving me very good options here.”

In this case finding healthy options was an obstacle to a transition to vegetarianism. Both interviewees agreed that health was an important influence when food shopping. The

female interviewee regularly 'calorie counted' as part of her food practice. The male interviewee was more interested in how food impacted on environmental issues but explained that he was not clear on the science that supported the link between the two. One of the changes the couple had made was to request that their food deliveries were not put in carrier bags. Later in the interview he revises his priorities and says that health is more important:

"So, I guess there's a practical issue versus an in principle issue there as well, in the sense of, in principle, I think, for me, health and environmental things are more or less even. This goes back to the dilemma of I'd like to have a vegetarian ready-meal, but there's not a healthy version of that. Yes, I guess, in most circumstances, I think I've gone with the meat version there. So, I guess maybe the health thing very slightly edges ahead."

In a discussion about animal welfare the female interview explained:

"We try and get free-range eggs, although I'm conscious that free-range eggs are still not necessarily great. Like, I'm much more likely to have my heartstrings pulled by something that's cute and fluffy. When it comes to, like, a fish or a chicken, I don't really like chickens, but, at the same time, I don't really want them to suffer, and battery farms are horrendous. So, when we were having chicken and things like that, when we ordered that, it would, at the very least, be free-range if it wasn't organic. Our eggs are always free-range. I don't know if there's anything else around that."

The female interviewee explained that while she has concerns about animal welfare standards in general, the affective appeal of species is an influence on food decisions. Free-range and organic function as indicators of welfare standards although the interviewee acknowledges that these are not necessarily reliable. In the case of dairy the female interviewee says, "But if I think about it, dairy farming bothers me, but not to the extent that I've actually managed to do anything about it." Throughout the interview there is an ongoing assertion that transition towards vegetarianism or veganism would be preferable but that there are obstacles. These included being unsure about where choices are being determined by a moral logic they feel comfortable with, convenience, concerns about health, food intolerances and availability of suitable alternatives. When asked how they would feel if one of them went vegan, the male explained that they would both have to transition to veganism for it to work:

"Yes, I mean, I wouldn't have a problem with it, and I think I'd probably be there with you, because one of the issues that I have with veganism is not issues with veganism, but issues with me personally being vegan is, continuously with this interview, I'm very lazy, and it's a lot of work. It would be more work for one of us to be vegan and one of us not to be vegan. So, actually, the more efficient solution if one of us was would be to both be."

This again underlines discussion above about the importance of couples acting in unison. During the interview it emerged that the extended families eat a lot of meat and when

visiting the parental home, the female interviewee is worried about inconveniencing her family by asking for vegetarian food:

“Last time I went back, I didn’t make any, kind of, big deal about... we’d had a conversation about the fact that we were mostly veggie, but I ate a lot of meat when I went back to my mum’s. So, I didn’t make any, kind of, big issue out of it, and I felt a little bit reluctant to do that. Not wanting to put people out, I guess, is part of it.”

The male interviewee also expresses concerns but notes that he may be wrong in his expectations about the response from a parent:

“Yes. I mean, that’s, kind of, where I’m at as well, especially because my mum’s really not very well-off at all. So, if I go back or whatever, going back with specific like, “Ah, I’m not going to eat this,” or whatever, just feels a bit obnoxious. I mean, she seems to be fine with it. I mean, she was fine when my brother had gone vegetarian. So, I suspect maybe it’s less of an issue than I thought.”

When asked why they ate meat and dairy, both interviewees claimed that the key reason was convenience. Towards the end of the interview, the male interviewee explains that he feels that it is the transition to veganism that would be the most difficult and that if they were able to get through that phase, there would be a good chance they would adhere long-term to a vegan diet. In the case of couple 4, both partners were interested in transition to veganism and could identify clearly where the obstacles to their transition lay. Transition by both partners and ease of access to healthy pre-prepared vegan food other than Quorn (due to the female interviewee’s food intolerances) would be central to making veganism a realistic option.

Couple 5 who were both female (18-24 and 25-34) explain during their interview that cost is the main influence on food purchase decisions with health being a recent concern. When asked how they would feel if one partner went vegan, both interviewees said they would feel annoyance because it would mean that they had to eat separate meals and neither could envisage going vegan unless there was a very gradual transition which was unlikely. When asked about reasons for eating meat and dairy, one interviewee pointed out that she occasionally felt conflicted over food choices:

“Yes, it’s comfort food a lot of the time. If you’re hungover and somebody offers you a bacon sandwich... I love pigs and I do, I always feel guilty, but it is taste. It’s like that hunger craving isn’t it?”

Like other interviewees in this study, there was an acknowledgement of the cognitive dissonance required to both love and eat animals. As in other interviews, the affective appeal of particular species is mentioned as the source of the conflicted feelings. Ultimately, it was acknowledged that personal satisfaction through taste was a compelling driver that could override any other feelings of guilt. As with many of the interviewees in this study,

Quorn is the only brand of vegan and vegetarian food mentioned. One of the interviewees commented:

“And health sometimes I think as well. I have a lot of Quorn stuff which is obviously, is healthy anyway. I feel like grilled chicken is a healthy thing, and fish. We don’t really eat fish.

We buy loads more Quorn and stuff than we do... Meat is like a bit of a treat if anything. We don’t always have it in.”

Given the frequency of mentions throughout the interviews for this study it is reasonable to suggest that the Quorn brand is a household name, has widespread recognition as a main meat substitute, is associated with being a healthy foodstuff and is used by omnivores as a regular purchase. For many omnivores in this study, Quorn was normalised as a regular purchase. Most participants did not qualify what form the Quorn took unless prompted and no interviewees in the omnivore group stated whether they purchased vegan or vegetarian Quorn products.

Couple six were female (45-54) and male (45-54) who both identified as omnivores whose main influence was health when it came to food purchasing decisions.

“I think, probably, for the last 10 years, we’ve been a lot more conscious around what it is that we’re eating from a health perspective. So we don’t buy processed food. We cook all our own food, and we are quite interested in nutrition. One of the ladies I work out with is a nutritionist, and she does detoxes. So we probably did our first detox about seven years ago. No, it must be about ten years ago. It made us really, really think about how we were eating and what we were putting in our mouths. So we are conscious, from a health perspective.”

The male interviewee noted that there are pressures to purchase non-healthy foods:

“But it’s like anything: it becomes more of a way of life after a while, if you do it long enough. But you have to get over that first hurdle, because supermarkets and advertisers, everywhere you go, don’t make it easy to make the right choices. Because they promote what’s best for them to sell, and not necessarily what’s best for you to eat.”

The couple discussed at length that living healthily requires planning and adherence to a routine. They commented on how difficult it is for other people to have the lifestyle they have because of time and money. Similar to other interviewees over 45 in this study, awareness of a link between food and health was identified as something that has emerged as the individuals reflected on where they are in their life stage and any changes to their wellbeing. While the female interviewee said that she had always maintained a balanced and moderate lifestyle, the male interviewee described the changes in this way:

“Yes. I wouldn’t call it a mid-life crisis, but I think you get to a point in your life where you make a decision. As you get older, you notice people more. You compare yourselves: body

shape, lifestyle and things like that. You get to a point where your metabolism shuts down, pretty much. I look at my son, and he eats what he wants, when he wants, and his physique is pretty much the same all the time. I used to be like that, and all of a sudden, it stops.

It was this typical thing. I looked in the mirror: fat, bloated, tired. "I've got to make a choice here of which one I want to do." So I took up the exercise and made a change. I'm not saying that's the way everybody should be, but it's a conscious decision people make, I think [...]"

Over the course of the interview, the male interviewee referred to his having a “meat and two veg attitude” and later explained that he would “struggle to think of a meal without including meat”. The female interviewee is described as more “adventurous” and willing to try new things including meals that do not have any meat in them. When asked how it would affect them if one partner were to go vegan, the female interviewee said that she would be more likely to try veganism. The male interviewee explained that he has long held the stereotype of a vegan as “*this pasty, white person that didn't have enough energy*” and used this as a reason to eat meat in the past. He talked about the new available options and noted that a product like Quorn might make veganism easier but saw veganism as too restrictive to contemplate:

“And I think being a vegetarian could be a challenge for me, but being a vegan... If you take out eggs and fish from that as well, and cheese, it's like, "Wow." You're just going to eat potatoes for the rest of your life, aren't you? That's all there is.”

Similar to other omnivores in this study, we find that the concept of veganism is often reduced to a single plant-based source; a proxy for perceived limitations of choice. When asked if he considered veganism healthy, he expressed concern about possible deficiencies and the difficulty in addressing them:

“I think it has health aspects to it, but I also think that there is the potential- I haven't done any research, but I always still have this vision in my mind that they are withholding nutrients from their body through not eating meat, potentially. I'm sure there are ways that they get replaced, but you have to work harder.”

The female interviewee explained that she would need to see a doctor if she were planning to go vegan and referred to veganism as an “extreme diet”.

The male interviewee showed a strong attachment to meat through reasons of taste, associations with health and the normalisation of a meat-based meal since childhood:

“I think, for me, I enjoy the taste, the texture and the health properties from them. Also, I was brought up in an age where it was a meat and veg- I've always looked at meals as including- [meat and two veg]"

The female interviewee prioritised protein from meat as a health benefit in addition to taste. Both interviewees talked about texture as being important and recounted instances when they were eating and enjoying something that they thought was meat but then discovered it wasn't meat and had to stop to question whether they could continue to enjoy it:

"Yes, as soon as I realised there was no chicken, I was like, "Well, that's no good." So it's psychological. It really is. I honestly say it's just down to personal preference, and mainly, in texture and taste."

By the end of the interview, the interviewees noted that the process of talking about veganism for the purpose of the interview might challenge them to change some of their food practices. It is interesting to note that through the course of this research the act of talking about their own food practices led interviewees to remark that they would reflect further on what had been discussed. Where there was an openness to discussing vegan transition it is notable that the act of discussion was regarded by some interviewees (and in the focus groups) as enough to trigger an interest in knowing more or even expressing a desire to change their practices. As noted above, we have not followed up with any of the participants in this study so cannot comment on whether there has been any action after taking part in the research.

Couple 7 were female (55-64) and male (55-64). The male interviewee identified as mainly vegetarian but ate meat occasionally. When asked about vegetarianism he explained that he began to reduce his meat consumption when he was young:

"It was when I was a child. The guy next door had been a farmer, he took us past an abattoir and said, "There's your lunch," when I was about five. Partly from that time I didn't really eat much meat at all."

The female interviewee in this couple noted that when the male interviewee ate meat it was in a form that *"didn't look like animals"*. The male interviewee agreed and added that after living abroad where *"the quality of the meat wasn't very good"* he reduced his meat intake further. When discussing veganism, both interviewees identified similar obstacles as were evident in other interviews: Concerns about protein, iron, vitamin deficiency, convenience, time taken to read labels for difficult to spot animal ingredients such as gelatin, time to cook from scratch, perceptions of veganism being restrictive and that vegans are unhealthy, and that meat and dairy consumption is natural. This couple also expressed concern about children being vegan and potential complications for pregnant vegan women. The female interviewee said:

"Yes. I think vegans aren't always in the best of health sometimes if they don't get it right. I think sometimes that's because by nature we are omnivores. I'm not convinced at the moment that we can sustain ourselves completely without having the things like the milk. Even if we're not eating animals, we're eating animal products, aren't we?"

The male interviewee explained that he does make vegetarian meals. The couple explained that they adjusted meals to suit both partners so that if the male partner cooked a vegetarian meal the female partner might add some meat to it. When asked what the impact of one partner going vegan would be on them as a couple, both interviewees agreed that the impact would be “limited”. The couples existing practices were informed by the perception of adjustments to a meal rather than, as some couples describe, the difficulty of cooking two separate meals. One partner going vegan would be an extension to existing practices of meal adaptation. The interviewees do not therefore identify meals as distinct but as something that can be shared and shaped to suit individual preferences.

Couple 8 were female (35-44) and male (35-44) who both identified as omnivores. There was a history of disordered eating in the female interviewee’s family. When asked how it would impact their relationship if one partner were to go vegan, the female interviewee explained that she had concerns that veganism is used by people she knows as a “cover for an eating disorder” and that she would have concerns if another member of the family became vegan because of the potential impact on a child:

“I would really want to think about why he was doing that. There is some of this having a disgust response to other people’s food and tutting, and that kind of stuff, that I just really wouldn’t want in the house because I wouldn’t want it in front of the baby and all of that.”

As we have noted above, for those individuals who had experienced disordered eating themselves or within a family, veganism can be associated with restrictive dietary practices. The responses of vegans towards non-vegan food might also be constructed as a problematic influence that might lead to active avoidance of vegans amongst people with experiences of disordered eating.

Couple 9 were female (55-64) and male (65-74). The female interviewee identified as vegetarian, the male interviewee as omnivore. The female interviewee discussed why she became vegetarian:

“We used to live in [...], which is an old mining place really. A village near [...], if you’ve heard of that, on the Tyne Valley. There was a local butcher, there still is actually. Their cattle were out on the field, so it was free range and proper really. Often when I came home from work, they had a slaughter house at the back of the butchers, before the animals all had to be taken to a slaughterhouse.

I would often see cattle that I’d seen at the end of our garden, there was a field beyond that, being taken into the back to be killed. I thought, “I can’t bear it anymore.” Yet that was probably the best way to rear and kill cattle, nearest to home, not intensive farming, out on the fields and a good life until they died. I don’t know, somehow it seemed to get to me.”

In this account, the interviewee noted the differences in animal agriculture practices, which many of the other participants over the age of 55 in this study mentioned. She also

highlighted that proximity to the realities of animal slaughter have had a lasting impact on her own food practices.

It is also of note that participants in age groups over 55 in this study were more likely to talk about children and viewed veganism as something that was only suitable for adults. As a female participant in couple 10 commented:

"I don't know, for some people, I've no idea why. I don't think anybody should influence their own thing on family and children, they should introduce children to general food I think because they have to live in the world like everybody else so I think it would be a bit sad."

Other participants in age groups over 54 also commented on how children are disconnected from food and food production practices. The female interviewee in couple 9 said that *"Some children had never seen some of the fruit and veg, they just didn't know what it was."* The male interviewee in couple 9 noted that *"A lot of young people won't have experienced something like a slaughterhouse or intensive farming, battery hens and that sort of thing. That will put them off [for] good."* It is of note that within our study, it was apparent that many people over the age of 55 held views that were critical of contemporary farming practices and particularly 'intensive' or 'factory' farming which they compared with non-intensive farming practices from the twentieth century.

Interview Key findings:

- Many people in age groups 55 and over were critical of current animal agriculture practices. These accounts are important in that they do not normalise extant practices and indeed their accounts go some way to framing current animal agriculture practices as aberrant. Together such accounts may provide a compelling critique of changes to farming that resonate with the current appeal of narratives about social traditions and practices.
- Individuals with experiences of disordered eating may find veganism overwhelming, overly restrictive, and emulating patterns similar to those of disordered eating. They may also actively dissociate from vegans who are perceived as holding judgemental views about food. While views on veganism and disordered eating are not widely represented in our study it is notable that where a relationship between veganism and eating disorders is expressed, it is from participants in the age groups 18-24, 24-35 and 35-44. Whether eating disorders specifically, or other previous or continuing health conditions, this should be an important area of further consideration for vegan advocates
- Eating practices are often subject to routines. These routines may be a barrier to reduction or transition. As the interviews demonstrate there are a wide range of routine practices associated with food that include shopping lists, planned diets, making the same purchases for staples and snacks or treats, having cow's milk in tea and so forth.
- Familial dynamics are a major barrier to transition, reduction or even maintenance of veg*n eating practices. This may include feelings of awkwardness, discomfort, embarrassment in asking for veg*n food when in a close relative's home. Individuals may alter their preferred dietary practices to accommodate a partner or relative especially when obstacles such as making more than one meal arise.
- Familial dynamics are also a major pathway to reduction and transition. Vegan family members increase familiarity and knowledge of veganism for non-vegans. Non-vegans who value the inclusion of eating as part of regular socialising practices with vegans in their family or social circle, those who cook for vegan family members or friends tend to be open to imagining vegan transition in positive terms. They are also more likely to have tried and enjoyed vegan food.
- Attachments to meat and dairy are seldom expressed in singular terms. Pairings or multiple justifications for eating meat and dairy are entwined and usually conceived as beneficial to the individual, for example taste, healthiness, texture and convenience.
- There is a loosening of the association between meat and health. Meat is constructed as healthy and unhealthy and the meanings assigned to meat are now highly divergent. Where restriction takes place for reason of health, meat is viewed as a treat, something not to be eaten regularly. Vegetables, by comparison, have robust and singular associations with health and wellbeing.
- Talking about eating practices may help with transition or reduction. The process of talking about and reflecting on food practices may offer an important route by which

reduction or vegan transition can be supported. In this regard, public community workshops that incorporate different processes of reflection (arts-based methods, discussion groups etc) might be one way in which a vegan transition is enabled for some.

- The perception of food as being distinctly 'vegan' or 'not vegan' can lead to conflict in a family setting and notions that cooking for vegans means cooking separate meals. Constructing vegan meals as adaptable to other tastes and preferences might address some difficult familial dynamics around veganism. Where vegan meals are reframed as easily adaptable by simply adding another non-vegan component can benefit those who might otherwise feel that they have to accommodate the preferences of non-vegan family or friends.
- Perceived barriers to veganism include cost, concerns about protein, iron, vitamin deficiency, convenience, time taken to read labels for difficult to spot animal ingredients such as gelatin, time to cook from scratch, perceptions of veganism being restrictive and that vegans are unhealthy, and that meat and dairy consumption is natural. Time, convenience, and health concerns predominate in discussions about difficulties associated with veganism.
- Quorn is the best-known brand of veg*n food. No other veg*n food brands were mentioned during the interviews which may strengthen perceptions of lack or choice.
- The vegetarians in this sample indicate that their eating practices are increasingly performed in relation to, and under the influence of, meanings from veganism. The majority of vegetarians interviewed were eliminating animal products beyond the typical vegetarian exclusion of meat. Further research is recommended to better judge whether this points to the decline of vegetarianism in its traditional ovo-lacto form. These different gradations of vegetarianism could be important for more targeted vegan advocacy initiatives.

7. Project key findings summary

Eating practices

- Eating practices are often subject to routines. These routines may be a barrier to reduction or transition. As the interviews demonstrate there are a wide range of routine practices associated with food that include shopping lists, planned diets, making the same purchases for staples and snacks or treats, having cow's milk in tea and so forth.
- Perceived barriers to veganism include cost, concerns about protein, iron, vitamin deficiency, convenience, time taken to read labels for difficult to spot animal ingredients such as gelatin, time to cook from scratch, perceptions of veganism being restrictive and that vegans are unhealthy, and that meat and dairy consumption is natural. Time, convenience, and health concerns predominate in discussions about difficulties associated with veganism.
- Pescatarians and vegetarians held more positive beliefs about the healthiness of veganism in contrast to omnivores. For example, whereas 20.5% of omnivores did not think veganism could be a healthy way of eating, only 5.8% of pescatarians and 1.3% of vegetarians thought so.
- The vegetarians in this sample indicate that their eating practices are increasingly performed in relation to, and under the influence of, meanings from veganism. The majority of vegetarians interviewed were eliminating animal products beyond the typical vegetarian exclusion of meat. Further research is recommended to better judge whether this points to the decline of vegetarianism in its traditional ovo-lacto form. These different gradations of vegetarianism could be important for more targeted vegan advocacy initiatives.

Meat and dairy meanings

- A slightly higher proportion of male respondents (18.1%) thought meat was essential to a healthy diet in comparison to women (15%). It was very similar in terms of perceptions of drinking milk being essential to a healthy diet (8.8% of men, 8.2% of women).
- Attachments to meat and dairy are seldom expressed in singular terms. Pairings or multiple justifications for eating meat and dairy are entwined and usually conceived as beneficial to the individual, for example taste, healthiness, texture and convenience.
- There is a loosening of the association between meat and health. Meat is constructed as healthy and unhealthy and the meanings assigned to meat are now highly divergent. Where restriction takes place for reason of health, meat is viewed as a treat, something not to be eaten regularly. Vegetables, by comparison, have robust and singular associations with health and wellbeing.

- Many people in age groups 55 and over were critical of current animal agriculture practices. These accounts are important in that they do not normalise extant practices and indeed their accounts go some way to framing current animal agriculture practices as aberrant. Together such accounts may provide a compelling critique of changes to farming that resonate with the current appeal of narratives about social traditions and practices.
- Participants were highly resistant to messages that were perceived to be biased towards veganism from individuals and organisations. Participants were more open to messages that they felt communicated a balanced view.
- Self-excluders across the focus groups tended to regard themselves as highly resistant to pro-vegan messages, felt that they were well informed about animal welfare, and were more likely to hold the strong belief that diet is a personal choice. Self-exclusion of animal products in over-55s was for either health or ethical reasons.
- Despite finding video footage more compelling than still images, most participants said they would actively avoid films or video of animal cruelty because they considered it too distressing to watch.

Family/social

- Familial dynamics are a major barrier to transition, reduction or even maintenance of veg*n eating practices. This may include feelings of awkwardness, discomfort, embarrassment in asking for veg*n food when in a close relative's home. Individuals may alter their preferred dietary practices to accommodate a partner or relative especially when obstacles such as making more than one meal arise.
- Familial dynamics are also a major pathway to reduction and transition. Vegan family members increase familiarity and knowledge of veganism for non-vegans. Non-vegans who value the inclusion of eating as part of regular socialising practices with vegans in their family or social circle, those who cook for vegan family members or friends tend to be open to imagining vegan transition in positive terms. They are also more likely to have tried and enjoyed vegan food.
- Respondents who reported that they had vegan friends or family had a considerably more positive view of the healthiness of veganism. 87.9% of those with vegan friends or family thought that veganism could be a healthy diet, compared to 68.9% of those who did not. 13.5% of those with vegan friends or family thought that meat was an essential part of a healthy diet, compared to 25.9% of those who did not. 6.4% of those with vegan friends or family thought that cow's milk was an essential part of a healthy diet, compared to 15.7% of those who did not. 50.% of those with vegan friends or family had health concerns about becoming vegan, compared with 57.7% of those who did not.
- Large proportions of the sample had friends or family who were vegan (80.1%), had eaten a vegan meal (83.9%) and 90% thought that it was easier to eat vegan today

compared with 10 years ago. Such findings could be taken to demonstrate the increased social presence of veganism in contemporary UK life.

- The perception of food as being distinctly 'vegan' or 'not vegan' can lead to conflict in a family setting and notions that cooking for vegans means cooking separate meals. Constructing vegan meals as adaptable to other tastes and preferences might address some difficult familial dynamics around veganism. Where vegan meals are reframed as easily adaptable by simply adding another non-vegan component can benefit those who might otherwise feel that they have to accommodate the preferences of non-vegan family or friends.
- Talking about eating practices may help with transition or reduction. The process of talking about and reflecting on food practices may offer an important route by which reduction or vegan transition can be supported. In this regard, public community workshops that incorporate different processes of reflection (arts-based methods, discussion groups etc) might be one way in which a vegan transition is enabled for some.

Health

- Over 84% of the sample of non-vegans thought that veganism could be a healthy way of eating.
- 84% of the sample did not think that eating meat is essential for a healthy diet.
- Over 91% did not think that drinking cow's milk is essential for a healthy diet.
- However, over 52% reported that they would have health concerns about becoming vegan.
- Differences in responses from those in different income bands were not large, though most pronounced in regard to whether respondents would have any health concerns about becoming vegan. For those with an annual income of under £30k 53.5% had health concerns about becoming vegan, for those earning over £30k 48.8% had health concerns.
- When veganism was considered in a health context it was discussed by participants as a restrictive or special diet, suitable for an existing condition, and perceived to be difficult to adhere to in the long term.
- Health messages were seen to have greater credibility than the environmental or ethics messages. Participants indicated that they have already or would in future pass on health information about veganism to a close friend or family member. There was least resistance to the health messages than to the environmental or ethics messages.
- All groups except the over-55 group rated health followed by environmental messages more effective than ethics messages. The over-55 group rated health and ethics messages in front of environmental messages.
- Of the health messages, the NHS website was regarded by a majority of participants as the most trustworthy source of information about veganism and as having the most credible message about vegan diets.

- The health messages judged most credible were least likely to be encountered compared with the less credible messages which were more likely to be encountered via social media.
- There was a marked difference in the perception of the healthiness of veganism between those who rated themselves as having a high knowledge of veganism in contrast to those who rated themselves as having a low knowledge of veganism. 90.7% of those who rated themselves as having a high knowledge of veganism thought that veganism could be a healthy way of eating, in contrast to 60% of those who self-rated their knowledge as low. 8.9% of those who rated themselves as having a high knowledge of veganism thought that meat was essential to a healthy diet, in contrast to 35.3% of those who self-rated their knowledge as low. 5.2% of those who rated themselves as having a high knowledge of veganism thought that cow's milk was essential to a healthy diet, in contrast to 19.3% of those who self-rated their knowledge as low. 47.9% of those who rated themselves as having a high knowledge of veganism would have health concerns about becoming vegan, in contrast to 53.3% of those who self-rated their knowledge as low.
- Health and academic sources were judged most credible while media and advocacy group messages judged less credible. In the latter cases this was due to widely held views that media and advocacy groups had self-serving agendas while health institutions were perceived to be concerned with the well-being of others and academics considered to have objectivity.
- Concerns over nutritional deficiencies and concerns related to a pre-existing health condition were the most significant. 59.5% of all of these responses related to concerns over nutritional deficiencies. As a proportion of the overall sample this equates to 31% of the entire sample expressing nutritional concerns about a vegan diet.
- A higher proportion of women (54.4%) than men (47.1%) had health concerns about becoming vegan.
- Individuals with experiences of disordered eating may find veganism overwhelming, overly restrictive, and emulating patterns similar to those of disordered eating. They may also actively dissociate from vegans who are perceived as holding judgemental views about food. While views on veganism and disordered eating are not widely represented in our study it is notable that where a relationship between veganism and eating disorders is expressed, it is from participants in the age groups 18-24, 24-35 and 35-44. Whether eating disorders specifically, or other previous or continuing health conditions, this should be an important area of further consideration for vegan advocates.

Perceptions of vegans

- Respondents were less likely to view veganism as suitable for infants, athletes, children, and pensioners.

- Perceptions of relationships between muscle, strength and meat consumption remain strongly held across all age groups and especially in males under 25. Participants expressed the view that images of vegan strength athletes and sportspeople challenged general stereotypes and their own views about what vegan bodies 'should' look like. We can speculate that sportspeople, especially those associated with muscularity and strength are important to the normalisation of veganism and are key to breaking down widely held assumptions about vegan deficiencies and associations with weakness.
- High levels of cynicism towards celebrity and media generally can impact on the reception of pro-vegan messages. Messages that were assigned to celebrities were judged to have little or no credibility and were not considered trustworthy sources of information about veganism.
- Despite a cynicism towards celebrity generally and low levels of trust in pro-vegan claims by celebrities, the high level of interest in celebrity lifestyles would drive non-vegans to read about celebrity vegans. Despite the complex nature of participants' engagement with celebrity endorsement of veganism, celebrity vegans are useful in normalising veganism within the wider media landscape through simply being identified as vegan as well as through personal narratives that involve being vegan for longer than one year and result in a positive change.
- The credibility of claims to being a 'vegan sportsperson' are reliant on length of time as a vegan and improvements to performance. Sportspeople who have been vegan for a year or more are more likely to have credibility than those who have been vegan for less than 12 months and those who have demonstrated improvement after becoming vegan are likely to have even greater credibility.

Generational differences

- A higher proportion of respondents aged 45 and over (24.6%) did not think veganism could be a healthy way of eating compared to those aged under 45 (11.3%).
- These age groupings were broadly similar in their belief that meat was essential to a healthy diet (17.1% of those aged 45+, 15.1% of those aged under 45) but a greater degree of those aged 45 and over (11.6%) thought that milk was essential to a healthy diet, compared to just 6.5% for those aged under 45.
- In the under 45 age groups there was a tendency to reject advocacy campaigns on the basis of a perception of emotional manipulation but not because there was a particular objection to the message itself. Indeed, many of these participants expressed the view that they were concerned about or opposed to farming practices that were detrimental to animal welfare.
- In the under 25 age group avoidance of emotional manipulation and a perceived lack of sophistication in communication strategies by advocacy groups reflected widespread tendencies to ridicule such approaches on social media in the form of memes or social media comments.

- Those in over-55 age groups who might be regarded as more resistant to pro-vegan messages and less likely to engage with such messages are still likely to self-exclude individual animal products for ethical and health reasons and that self-exclusion will have longevity. In the case of our focus group participants, some had self-excluded animal products for forty years or more. We propose that attachment to food practices in older age groups should therefore not be viewed as a barrier per se. In older age groups where attachment to eating practices is strong and where those practices include self-exclusion of animal products, those practices are likely to remain in the long-term.
- Over 55s are familiar with and receptive to health messages about meat reduction or exclusion, and increased fruit and vegetable consumption. Resistance increased when these were discussed in the context of a pro-vegan message. As over 45s were more likely to consider veganism as a fad or extreme, we can assume that stigma around the term 'vegan' persists in this age group. We speculate that over-45s are more likely to respond favourably to national animal welfare campaigns and mainstream health messages that advise on the benefits of animal product exclusion than to messages that are perceived to be specifically pro-vegan. However, based on the focus group data we assume that where changes are made they will be longer-lasting due to strong attachments to food practices. This may therefore suggest a generally longer transitional pathway to veganism for over 45s but with strong and lasting attachment to incremental changes.
- Participants over 45 were more likely to identify a message from the ethics cluster as credible than participants under 45. This we assume is because these participants were more likely to self-exclude and therefore more likely to identify an ethics message that aligned with their exclusion practices.
- Under 25 group participants were more likely to ignore a friend's pro-vegan message on social media but more likely to read a celebrity story that included a pro-vegan message to the end if they already had an interest in that celebrity's life. This reflects tendencies in social media practices to create echo chambers in which individuals are more likely to engage with views and interests that align with their own. Celebrity pro-vegan messages are crucial to normalising veganism for this group.
- Messages which relate to shared experiences of motherhood between humans and other species are more likely to be positively received by females over 35.

8. Recommendations

- Vegan advocacy organisations should respond to the health -related findings of this study. Networking with health professionals to communicate to the public on wide ranging and detailed aspects of plant-based nutrition, and working with health-related organisations and charities to address the concerns of people with pre-existing health conditions are two clear areas that should be addressed.
- Constructing vegan meals as adaptable to other tastes and preferences might address some difficult familial dynamics around veganism. Where vegan meals are reframed as easily adaptable by simply adding another non-vegan component can benefit those who might otherwise feel that they have to accommodate the preferences of non-vegan family or friends.
- Talking about eating practices may help with transition or reduction. The process of talking about and reflecting on food practices may offer an important route by which reduction or vegan transition can be supported. In this regard, public community workshops that incorporate different processes of reflection (arts-based methods, discussion groups etc) might be one way in which a vegan transition is enabled for some.
- Vegan pledge schemes should reconsider their focus on individuals due to the relationship and familial context of food practices. Monthly vegan pledges and vegan transition campaigns may be more successful if they account for these dimensions from the outset.
- Vegan advocacy organisations could do more to catalogue and communicate the growing range of vegan foods available to consumers in the UK within mainstream high street and smaller outlets.
- Further research is recommended to better judge whether there is a decline of vegetarianism in its traditional ovo-lacto form. These different gradations of vegetarianism could be important for more targeted vegan advocacy initiatives.
- Targeted messaging should address generational differences in attachments to meat and dairy.
- Social researchers should explore the full range of theoretical frameworks discussed in this report when investigating topics related to vegan transition. It is particularly important to focus on frameworks which can accommodate large scale, institutional dimensions.

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10. Appendices

Appendix 1

Edge Hill University

Vegan Food Survey

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Page 1: Information and Consent

FOOD SURVEY ABOUT VEGANISM

Information about the research

Veganism, a lifestyle that includes **not eating meat, fish, dairy, eggs or any animal derived ingredients**, is increasingly popular in the UK. The objective of this survey is to understand how people who are not vegan understand and perceive the practice of veganism. The online questionnaire is short and will take you approximately 15 minutes to complete.

FIRSTLY, WE REQUIRE YOUR INFORMED CONSENT BEFORE BEGINNING THE QUESTIONNAIRE, PLEASE READ AND, IF AGREED, CONFIRM THE FOLLOWING STATEMENTS:

1. I understand that the research will involve an online questionnaire * *Required*

Please select exactly 1 answer(s).

yes no

2. I understand that all information about me will be treated in strict confidence, my answers will be anonymous, and that I will not be named in any written work * *Required*

Please select exactly 1 answer(s).

yes no

- 3.** I have had the research explained to me in written form by the research team (in paragraph above) * *Required*

Please select exactly 1 answer(s).

- yes no

- 4.** I consent to taking part in the research and completing the questionnaire, and I am aware that I can withdraw from the research process at any time * *Required*

Please select exactly 1 answer(s).

- yes no

Data will be used and featured in future publications, such as reports and journal articles. In line with legal obligations under the Data Protection Act 1998 (Principle 5 of the Data Protection Act), personal data will only be kept for as long as it is required for the project and will be deleted three years after completion of the project in March 2019. During the project data will be kept securely using password protection.

At the end of the questionnaire participants have the option of leaving their e-mail address in order to take part in a further stage of the research. Such data will be kept securely, not shared outside the project team, and deleted at the end of the project.

If you wish to find out more about this project please contact Professor Claire Parkinson [claire.parkinson@edgehill.ac.uk] or Dr. Richard Twine [richard.twine@edgehill.ac.uk]. You can also contact, if you wish, a member of Edge Hill University not connected to the project, Professor Matthew Pateman [matthew.pateman@edgehill.ac.uk].

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Page 2: Demographic questions

- 5.** In which age range are you? * *Required*

Please select exactly 1 answer(s).

- 18-24
 25-34
 35-44
 45-54
 55-64
 65-74
 75 and above

- 6.** Which best describes your gender? Please select one option, or use the self-describe option. * *Required*

Please select exactly 1 answer(s).

- male
 female
 prefer not to say
 I prefer to self-describe my gender

- a.** If you prefer to self-describe your gender, please do so here

7. What is your country of residence? * Required

8. What is your ethnic group? * Required

Please select exactly 1 answer(s).

- White: English / Welsh / Scottish / Northern Irish / British
- White: Irish
- White: Gypsy or Irish traveller
- Other White background
- Mixed multiple / ethnic groups: White and Black Caribbean
- Mixed multiple / ethnic groups: White and Black African
- Mixed multiple / ethnic groups: White and Asian
- Other Mixed / multiple ethnic background
- Asian / Asian British: Indian
- Asian / Asian British: Pakistani
- Asian / Asian British: Bangladeshi
- Asian / Asian British: Chinese
- Other Asian background
- Black / African / Caribbean / Black British: African
- Black / African / Caribbean / Black British: Caribbean
- Other Black / African / Caribbean background
- Other ethnic group: Arab
- Other ethnic group

a. Other White background, please write here

b. Other Mixed / multiple ethnic background, please write here

c. Other Asian background, please write here

d. Other Black / African / Caribbean background, please write here

e. Other ethnic group, please write here

9. What is your religion (this question is voluntary)

Please select no more than 1 answer(s).

- No religion
- Christian (including Church of England, Catholic, Protestant and all other Christian denominations)
- Buddhist
- Hindu
- Jewish
- Muslim
- Sikh

a. Any other religion, can be written in here

10. What is your occupation? (If retired, please write retired and state former main occupation) * *Required*

11. Which annual income band applies to you? * *Required*

Please select exactly 1 answer(s).

- Less than £20,000
- £20,000 - £29,999
- £30,000 - £39,999
- £40,000 - £49,999
- £50,000 - £59,999
- £60,000 and above
- retired

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Page 3: Main survey questions

12. Which of the following best describes your diet? * *Required*

Please select exactly 1 answer(s).

- Omnivore (eats meat, including fish, eggs and dairy products)
- Pescatarian (eats fish, eggs and dairy products, but no other meats)
- Vegetarian (does not eat meat or fish, but eats eggs and dairy products)

13. Have you ever followed a vegan diet? * *Required*

Please select exactly 1 answer(s).

- yes
- no

a. If yes, what was your main reason for deciding to no longer be vegan

14. Do you have friends or family who are vegan? * *Required*

Please select exactly 1 answer(s).

yes

no

15. Have you ever prepared a vegan meal? * *Required*

Please select exactly 1 answer(s).

yes

no

16. Have you ever eaten a vegan meal? * *Required*

Please select exactly 1 answer(s).

yes

no

a. If yes, how was your experience of the taste of the meal?

17. Have you ever asked a restaurant, on behalf of others, whether they have vegan options? * *Required*

Please select exactly 1 answer(s).

yes

no

18. Have you ever eaten out at a café or restaurant which serves vegan options? * *Required*

Please select exactly 1 answer(s).

- yes
- no
- I don't know

19. How would you rate your own knowledge of veganism? * *Required*

Please select exactly 1 answer(s).

- High
- Medium
- Low

20. If you were set a challenge to follow a vegan diet for a month, how do you think you would find it? * *Required*

21. Do you think eating vegan is easier today compared to 10 years ago? * *Required*

Please select exactly 1 answer(s).

- yes
- no
- I don't know

22. Do you think that veganism can be a healthy way of eating? * *Required*

Please select exactly 1 answer(s).

yes

no

23. Do you think that eating meat is essential for a healthy diet? * *Required*

Please select exactly 1 answer(s).

yes

no

24. Do you think that drinking cow's milk is essential for a healthy diet? * *Required*

Please select exactly 1 answer(s).

yes

no

25. Would you have any health concerns about becoming vegan? * *Required*

Please select exactly 1 answer(s).

yes

no

a. If yes, please write here what they would be

26. Which of the following social groups do you think veganism is suitable for? (please tick all that apply) * *Required*

Please select between 1 and 7 answers.

- Infants 0 - 5 years
- Children 6 - 16 years
- Women over 65
- Men over 65
- Athletes
- All adults
- Nobody
- Everyone

27. What is your image of vegans? * *Required*

Please select exactly 1 answer(s).

- Broadly positive
- Neutral
- Broadly negative

28. If you were to become vegan would you be concerned about the reaction of friends or family? * *Required*

Please select exactly 1 answer(s).

- yes
- no

29. Please rank the following diets in terms of how you perceive their environmental impact (where 1 = most environmental impact, and 4 = least environmental impact). * *Required*

Please don't select more than 1 answer(s) per row.

Please select exactly 4 answer(s).

Please don't select more than 1 answer(s) in any single column.

	1	2	3	4
Vegetarian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Omnivore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vegan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pescatarian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

30. Which of the following words do you associate with veganism? (please tick any that apply) * Required

Please select between 1 and 17 answers.

- Environmental
- Strange
- Working Class
- Misguided
- Weird
- Restrictive
- Ethical
- Unmanly
- Progressive
- Feminine
- Extreme
- Trendy
- Compassionate
- Difficult
- Middle Class
- Pleasurable
- Peace
- Other

a. If you selected Other, please specify:

31. Which of the following do you view veganism as? (please tick all that apply) * Required

Please select between 1 and 7 answers.

- a diet
- a philosophy
- a fad
- a belief system
- a moral position
- a health movement
- a lifestyle

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