

PERCEPTIONS ABOUT *VEGANISM*

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Perceptions about veganism

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EXECUTIVE SUMMARY

Introduction

Veganism is an individual and collective undertaking that aims at eliminating, as far as is possible, all forms of animal exploitation. It involves, amongst other practices, the adoption of a diet free from meat, dairy, eggs, and any other animal-derived product. In recent years, the vegan movement and diet have been growing in popularity. The extent to which individuals, institutions and groups all over the world adhere to veganism has crucial consequences for animals and the environment. Hence, it is important to understand contemporary perceptions held by vegans and non-vegans about veganism. The present research aims at contributing to understanding these perceptions.

Method

A survey was conducted amongst the subscribers to the newsletter of The Ecologist online. The approach was predominantly qualitative. Two hundred and sixty-nine subscribers participated in the research. They answered closed and open questions about reasons to change their diets, their perceptions about the joys, obstacles and challenges related to veganism, the factors that could lead them to go vegan and the information on veganism that they desired. The data were analysed with thematic analysis and subsidiary statistical analyses.

Results

The results show that participants identified barriers to veganism such as personal preferences and tastes, practical barriers such as lack of time and availability of vegan food and social barriers such as stereotypes and abuse directed towards vegans. Participants were categorised in three different groups, non-vegans who were not considering going vegan; non-vegans who were considering going vegan; and vegans. The results show that these groups held substantially different beliefs and attitudes towards veganism. Non-vegans who were not considering going vegan believed that veganism is or may be unhealthy, is or may be harmful to the environment, is “unnatural”, and may have detrimental social consequences. Some participants in this group declared that nothing would lead them to veganism. However, some of them stated that changes in the market and society, in personal life or concerning certain knowledge about the negative impact of meat-eating on animals and the environment could tip them over into being vegan. Vegans highlighted the benefits of veganism for animals, the environment and human health. For the vegan participants, witnessing the suffering of animals and realising the dominant dismissive attitudes towards their suffering are major challenges of veganism. For overcoming the barriers to veganism, vegan participants declared that they searched for information on the various related topics, cultivated cognitive and emotional strategies, and joined vegan communities. Non-vegans who were considering going vegan generally adopted intermediary positions between the two previous groups. Participants requested

information about veganism mainly in such a way that could confirm their pre-existing beliefs and attitudes towards it. Nevertheless, there were also requests for practical information concerning subjects such as vegan recipes, child nutrition, and strategies for transitioning to a vegan diet.

Concluding remarks and recommendations

Individuals who identify themselves as non-vegans and environmentalists may experience cognitive dissonance (a specific type of psychological discomfort) when exposed to information about the environmental impact of the meat, dairy and egg industry. Dissonance may have been a driver for the construction of beliefs by some participants, such as the beliefs that veganism is unnatural and harmful for human health and the environment. Professionals and institutions interested in defending animal rights and promoting human health, wellbeing and social engagement may consider discussing specific topics with the public as follows. This report highlights topics such as the impact on animals and the environment of the so-called “free-range” system, the use of soya and other vegetables for animal feed, the supposed association of veganism with the industry of processed foods and the conditions for conducting a healthy vegan diet. Non-vegans concerned with the environment may discover that veganism is empowering for fighting climate change and environmental degradation. The concluding remarks of this report provide references to recent and comprehensive scientific works on these subjects.

INTRODUCTION

Veganism is on the rise¹, and so is the worldwide consumption of meat². The Vegan Society defines veganism as “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”³. The extent to which individuals, groups and institutions all over the world adhere to this way of living has crucial consequences for animals⁴ and the environment, ecosystems and biodiversity⁵. Hence, it is of great importance to understand contemporary perceptions about veganism.

The Ecologist online conducted a survey on veganism amongst its newsletter subscribers, self-classified as vegans and non-vegans. The survey approached two general issues, (1) the perceptions of vegans about their experiences with veganism; and (2) the perceptions of non-vegans about veganism. The survey relied mostly on open questions, generating data suitable for thematic analysis⁶. This report summarises the data with a qualitative approach and subsidiary quantitative analyses.

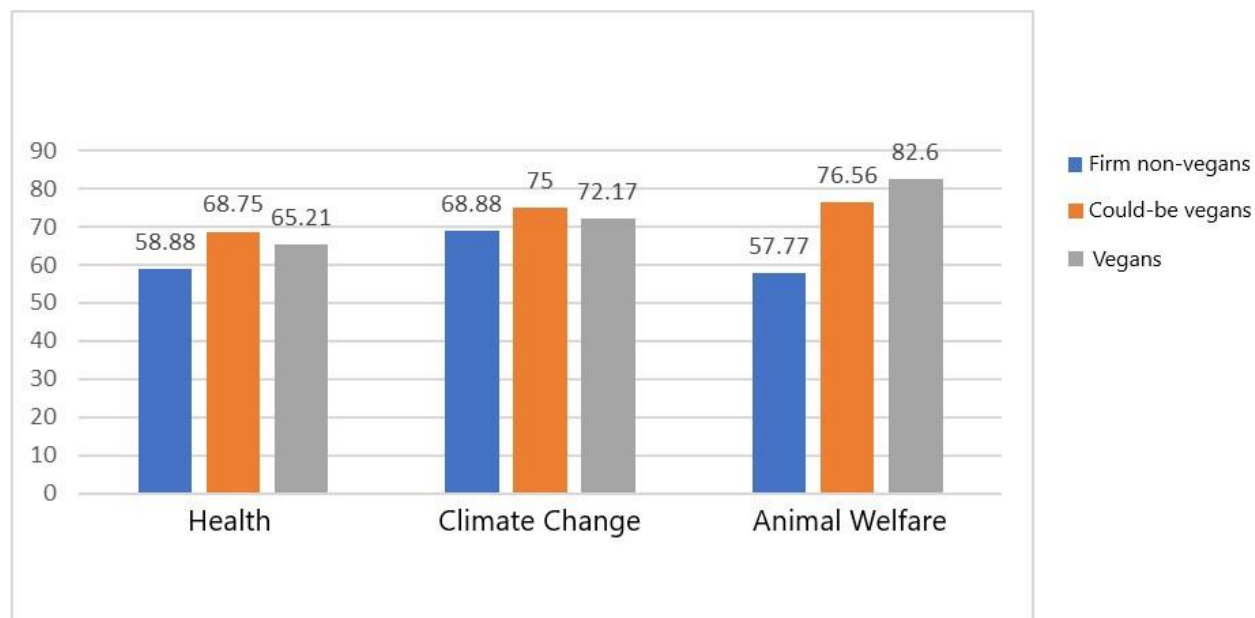
The survey included the following questions. (1) Are you vegan? (2) Are you considering going vegan? (3) Have you changed your diet for any of the following reasons? – With the provided choices, *Health*; *Climate Change*; and *Animal Welfare*; and the possibility of choosing more than one reason; (4) What are the joys of being vegan? (5) What are the barriers or challenges of being vegan? (6) How have you overcome the barriers and challenges of being vegan? (7) What would tip you over into being vegan? (8) What information would you like about veganism? (9) What arguments do you have against, or what are your concerns about, veganism? (10) What feature articles would you like to see in our [Resurgence & Ecologist] vegan issue? (11) Sociodemographic data.

Two hundred and sixty-nine subscribers participated in the survey⁷. There were 130 women, 88 men and in 51 cases the gender was missing. Participants’ mean age was 53.10 years⁸. According to their positions regarding veganism, the participants were classified into three groups:

- 1) Non-vegans who *were not* considering going vegan also referred to as *firm non-vegans* (90 participants);
- 2) Non-vegans who *were* considering going vegan also referred to as *could-be vegans* (64 participants);
- 3) Vegans (115 participants)⁹.

Statistical analyses were conducted to evaluate the participants’ answers to question (3), about the reasons for changing their diet. Figure 1 shows the percentages of participants in each group indicating the three considered reasons.

Figure 1. Percentages of participants in each group indicating reasons for changing their diet.



The groups were compared regarding the numbers of participants indicating or not each reason. The numbers of vegans and could-be vegans who selected Animal Welfare as a reason for changing their diet were significantly higher than the number of firm non-vegans indicating the same reason¹⁰.

Another statistical comparison was made regarding the selection of each reason per group. It could be expected that the percentage of participants indicating each reason in each group would be 50% (if the group was not associated with the reason). However, could-be vegans and vegans were significantly associated with all three reasons (the percentages were significantly higher than 50%). In contrast, firm non-vegans were associated exclusively with the Climate Change reason¹¹. These results suggest that the participants who were not considering going vegan prioritised environmental reasons (in comparison to the other two options provided) for orienting their diets and their beliefs about their diets. These participants may be identified as *non-vegan environmentalists*. Such a position had important implications for the qualitative data presented and discussed below.

The following topics describe the results obtained with the thematic analysis. Extracts from the original data are highlighted with quotation marks. The results are rich. They describe various nuances of the participants' perceptions about veganism and the reader may desire to follow these detailed descriptions. The thematic analysis also provided insight into the main ideas that articulate their beliefs, called *themes*. At the beginning of each topic, the reader will find a box titled *Introduction and Highlights*, containing the *themes* and a summary of the topic's findings. If a more agile reading is needed, the reader may consider focusing on these boxes and the final topic, *Concluding Remarks and Recommendations*.

The final topic expands the interpretation of the results and makes recommendations for professionals and institutions interested in discussing veganism with the considered groups. It focuses on the beliefs of non-vegans who were not considering going vegan, because they may be of special interest for individuals and organisations involved with vegan advocacy or research on the psychosocial impacts of veganism¹². The final topic also provides references to relevant scientific research and philosophical works concerning veganism. These references may be important for discussing veganism with the general public, especially negative beliefs and attitudes.

The joys of being vegan

Introduction and Highlights

Two main themes were identified in the answers regarding the joys of being vegan. (1) Being vegan generates positive outcomes for oneself such as health, well-being, tasty food, and creative cooking, and (2) it generates positive outcomes for others and the environment, with references to animals, climate change, and society. The references to well-being included physical aspects (e.g. more vitality) and mental aspects (e.g. a “clear and guilt-free conscience”).

Although participants in all investigated groups mentioned these ideas, there were some noticeable qualitative differences amongst the groups. Most participants who were not considering going vegan (firm non-vegans) did not answer the question and some of them cited problems of being vegan instead of joys. On the other hand, participants considering veganism (could-be vegans) and vegans highlighted the joy of avoiding cruelty against animals. Vegans were more eloquent concerning the benefits that veganism has for others (animals, environment, and society). Vegan participants stated that a sense of empowerment and being able to change society are some of the joys of being vegan.

Non-vegans who were not considering going vegan often did not answer this question (57 answers missing). They possibly felt that the question did not apply to them or thought there would be no joys in being vegan. Another hypothesis is that answering it would generate or magnify cognitive dissonance, i.e., a state of psychological discomfort associated with holding contradictory cognitions or cognitions and behaviours¹³. Four participants mentioned problems of being vegan instead of joys, such as perceived low variety in vegan food, veganism being “too difficult”, involving the need for supplements and not necessarily considering environmental issues like greenhouse gases, plastics and non-ethical companies.

According to other firm non-vegans, the joys of being vegan are the tasty food (also characterised as varied, colourful, new, organic, fresh, and local); innovative and better cooking; the incentive to learn about nutrition; the positive effects on health (including mentions of cholesterol, cardiovascular and age-related diseases, diabetes and easier digestion); the possibility of losing weight; the positive outcomes for animals (avoiding cruelty, slaughter, and the separation of calves from their mothers) and for the environment (including mentions of climate change and products’ water footprint). Participants also cited the experience of well-being associated with righteousness, moral superiority, avoidance of guilt and “lightness of body and soul”; the feeling of acting on important issues (“making a difference”, “converting” others); being part of a community, and seeing the diffusion of veganism. Non-vegans are more likely to experience cognitive dissonance regarding the products they consume because most of them, like vegans, consider hurting animals to be undesirable and wrong¹⁴.

Non-vegans who were considering going vegan stated that the joys of being vegan are reducing and avoiding the exploitation of animals (cruelty, confinement, torture, and killing), having empathy and compassion towards animals and feeling akin to them. They mentioned positive effects for the environment (sustainability, control of the “climate crisis” and securing a safe planet “for our grandchildren”). Participants cited the feeling of being happier, lighter and having a “clear and guilt-free conscience”. Some also referred to better health, more energy and avoiding bacteria in meat; eating tasty food; and experimenting with more creative cooking, new and simpler ways of cooking. A female participant (age 61) stated that the easy washing-up of utensils and dishes is “one odd pleasure of being vegan”. Participants cited benefits such as peace, more empathy to others and feeling closer to nature. Other could-be vegans highlighted effects for society, “not supporting cruel industrial practices”, adopting “ethical consumerism”, a “mindful action in the real world” and setting up a “good example”. One participant mentioned difficulties instead of joys (perceived low variety and high prices of vegan food).

The vegan participants provided longer answers and emphasized the benefits for animals, the environment and human health. A male participant (age 61) wrote, “[I feel] much, much healthier; feel good for making the single most important lifestyle change for the environment; feel good that my diet doesn't involve animal cruelty”. Some of the answers used more severe wording, “knowing that I'm not contributing to horrific animal brutality as well as ecological disaster” (female participant, age 52). A female participant (age 57) stated that the lives of animals should be valued as much as human lives, and that “they are as individual as you and I”. The mentions of the environment included the ideas of saving wildlife and preventing “ecocide”. Specific benefits to health referred to the prevention of cancer, high blood pressure, bloating and stomach aches as well as having a “clean body”. A female participant (age 62) asserted, “my body no longer hurts in all the joints”. There were mentions of physical well-being (e.g., agility, flexibility, vitality, lightness and more energy) and mental well-being (clear conscience, less or no guilt). Participants wrote about the joy of living “without dissonance” and in alignment with personal values. Some participants mentioned positive values such as non-violence, compassion, altruism, ethics, authenticity and rationality.

According to the vegan participants, “delicious” food and creative cooking experiences are also perceptible benefits, as well as avoiding the disgust of manipulating meat. Five participants stated that food products are less expensive. Some participants cited the benefits of eating “less junk” and others referred to the pleasure of discovering new vegan restaurants. Some ideas were possibly related to aesthetics, such as losing weight or being able to “eat a lot without putting on weight”, having clearer skin, less skin odour and looking younger.

Vegan participants were more eloquent when mentioning the benefits of being part of a community and meeting other vegans, qualified as friendly, like-minded, welcoming, and committed. Some participants mentioned the pleasure of explaining veganism to others and influencing others

(including through food). Some answers conveyed a sense of empowerment, e.g., not depending on governments to fight climate change. A male participant (age 56) stated that it is a joy to be “subversive”. Vegans’ mentions of societal impacts were extensive. One of the participants highlighted the adoption of a “consistent anti-oppression social justice stance” and another one the fight against “systems that perpetuate inequality and treat beings as merely means to an end”. A female participant (age 41) cited the violence of the meat industry against its workers, involving injuries and post-traumatic stress disorder. Some participants said that being vegan is “doing the right thing”. Others explained that it is not a “joy” but rather a moral obligation, including statements such as “joys? – it’s just my life”, and “I rather say I’m not vegan but others are carnists”. With the term “carnists”, the participant was probably referring to the work of social psychologist M. Joy¹⁵. The author explains that carnism is a pervasive ideology with societal, institutional and individual implications, allowing and justifying violence against animals.

The barriers or challenges of being vegan

Introduction and Highlights

The answers to the question about the barriers and challenges of being vegan led to the identification of three common themes: (1) there are individual barriers and preferences such as difficulties in ceasing the consumption of meat, dairy and eggs and appeals to tastiness; (2) practical barriers such as limited choices when eating out and lack of time for changing dietary habits; and (3) social barriers such as stigma, prejudice and abuse against vegans.

However, there were important differences amongst the groups. Non-vegans who were not considering going vegan expressed two specific themes, (1) *the vegan diet may be unhealthy* and (2) *it may be harmful to the environment*. The last topic of this report discusses these ideas and provides scientific evidence that can substantiate counter-arguments.

For the vegan participants, one of the major challenges of veganism was *witnessing the suffering of animals* and dealing with the lack of concern from society regarding their suffering.

Non-vegans who were not considering going vegan believed that vegan foods or some vegan foods are “(heavily) processed” or “unnatural” and that a “mixed diet” is better. A female participant (age 61) expressed concern about the scarcity of choline in a vegan diet and possible problems for the brain development of babies and toddlers. Participants mentioned personal health issues as barriers (e.g. diverticulitis). A female participant (age 36) declared having suffered from anorexia and feared that a vegan diet could harm her mental health. Participants believed that it is hard to ensure a balanced diet in general or specific nutrients (iron, proteins) in a vegan diet, leading vegans to the compulsory use of supplements. These beliefs may be related to the idea that veganism is not “normal” or “natural”¹⁶, expressed by a male participant (age missing), “Our ancestors for umpt[een] years were not vegan”.

Participants in this group expressed the idea that the vegan diet could be harmful to the environment. A female participant (age 66) mentioned the destruction of forests to plant soya. There were mentions of the problematic use of plastics and the emission of greenhouse gases caused by the airfreight of food (food “air miles”). Participants stated, for example, that “locally reared organic lamb [could be better than] organic chick-peas from afar”; and “[there are] irresponsible vegans importing unseasonal food”.

Firm non-vegans also cited individual barriers to veganism related to habit or taste, such as the difficulty of ceasing the consumption of fish and other meat, dairy (especially cheese), eggs and honey. Some participants perceived difficulties in maintaining a varied diet, finding “exciting recipes” or tasty alternatives. The perception of practical barriers included worries about how to start a vegan diet, the lack of knowledge of what to eat and the lack of time for changing their current diet and the

“stock” in the “cupboard”. They included the belief that veganism is expensive and inconvenient, e.g., whilst travelling, eating out, leading a busy life, having to “manage a diet for a family” or “fussy children”. Other practical barriers would be dealing with unlabelled animal ingredients in food, having time to cook pulses and (in the case of a participant with coeliac disease) finding vegan-gluten-free alternatives.

For firm non-vegans, the social barriers to veganism would involve negative consequences for others, such as obliging hosts to offer “alternative” foods, the “impact on growers”, the possible continued “exploitation of producers” and impositions that would affect people’s “right to make their own decisions”. But participants mostly referred to negative social consequences for oneself. Being vegan would involve facing “external pressure”, prejudice, problems when eating at a friend’s or relative’s house, and criticism by relatives and friends. A female participant (age 54) who had been vegan stated that “friends stopped inviting me to dinner”. A vegetarian female participant (age 27) wrote, “stereotypes and aggressive judgement from meat-eaters. Sometimes it can make it intimidating [...] to ask for a meat-free option. It’s also frustrating being lumped in the same group as fanatical extreme vegans”. Forty-two participants in this group did not answer the question.

Non-vegans who were considering going vegan also mentioned the idea that a vegan diet may be unhealthy. Participants cited concerns about processed food and the possible lack of iron and vitamin B12. Some of them believed that obtaining correct or sufficient nutrients (in general or specific, e.g., protein, calcium) is a challenge in a vegan diet.

For could-be vegans, the individual barriers included ceasing the consumption of fish, eggs and especially dairy, sometimes referring to specific uses such as “cream in coffee”, “cream cakes” and “milk for tea”. Three participants mentioned the challenge of abandoning leather, and according to one of them, having to buy “artificial plastic shoes every year”. Some participants appealed to the tastiness of animal-derived products and deplored the “poor quality” that they perceived in dairy alternatives. Individual challenges also included changing habits, getting used to novelties (recipes, tastes) and “laziness”.

In this group, the perceived practical barriers to veganism included the lack of (good) vegan options, the limited menus when eating out or travelling, the amount of time for planning or preparing meals, “tedious” cooking, the need to use more spices or to shop in multiple stores. There were mentions of the challenge of finding “UK produced” or “ethical low-carbon goods” and five mentions of the idea that veganism is expensive, including a specific allusion to the high prices of “organic vegetables and tofu”. Participants cited social barriers such as the “resistance” from friends and relatives. They cited the stigma of being “weird”, “judgy”, “fussy” or a “fad follower”. A female participant (age 57) declared that “militant vegans” are one of the barriers. In this group, three participants answered, “none” (there are no barriers or challenges) and six answers were missing.

The vegan participants were once again more eloquent than the other two groups. A theme was specific to this group, a challenge of being vegan is *witnessing* the suffering of animals and the dominant dismissive attitudes towards their suffering. A female participant (age 34) conveyed a sense of urgency, “[a challenge of being vegan is knowing about] baby animals being slaughtered by billions every day and not being able to change it right now”. Participants referred to the imposed and ceaseless nature of *witnessing*, “[I perceive] animal cruelty constantly being forced upon me”, “It breaks my heart daily”. Other participants mentioned the persistence of economic arrangements that maintain the *status quo*, e.g., the interests of industries, media and governments and the perception that farmers do not have help for transitioning to vegan farming. Participants cited the dominant attitudes of non-vegans towards veganism, the perception that “most people won’t change”, not even “animal lovers and environmentalists”, and the “wilful ignorance of the majority” concerning animal suffering. According to some expressions, *witnessing*¹⁷ involves “despair”, “frustration”, “suffering”, and “a tremendous amount of grief”.

The vegan participants highlighted the social barriers and challenges of veganism. The barriers included the resistance, pressure, hostility, judgment, and mockery from family, friends and other people, and prejudice against veganism even in the United Kingdom’s (UK) National Health Service (NHS). Participants cited interactions with people who try to challenge veganism, including those who accuse vegans of “not being vegan enough”. There were mentions of misinformation, and specifically the ideas shared by non-vegans that veganism would be unhealthy or as bad as meat-eating for the environment. “It’s also hard not to want to force the truth on others” declared a female participant (age 57). Vegans perceived themselves to be victims of stereotypes according to which they are extremists, pretentious, elitists, and “unmasculine” (male participant, age 50). They are accused of being disruptive and violent, generating discomfort (cognitive dissonance) in others. They perceive exclusion and abuse, e.g., verbal attacks, “being bullied in school”, “being left out of plans”, not being able to share food with friends, and friends who do not come around anymore. A 20-year-old female participant wrote, “people are rude to me, call me difficult sometimes [...] my boyfriend's parents are not very accommodating – they will cook for everyone else but not me”.

Vegan participants also mentioned practical barriers to veganism, especially the lack of availability of vegan food. This included specific situations such as eating out, eating out late at night, buying takeaway food or when travelling, eating in small towns and rural areas. Eating at events or in institutions and trying to find well-balanced or gluten-free options would also be barriers¹⁸. Participants complained about the lack of choices in menus and the need to carefully explain about vegan food to waiters and caterers. There were allusions to the lack of information in labels, hidden animal ingredients in some products, and lack of time to prepare nutritious vegan meals. The concerns about health and the environment may be categorised here. Vegan participants mentioned

difficulties in ensuring a balanced diet, enough protein, iron and vitamin B12 and avoiding processed foods, unseasonal ingredients and non-recyclable packages.

In this group, the personal barriers included the lack of knowledge about cooking and recipes, lack of knowledge about health effects, and “lack of guidance in the early days”. Participants mentioned the challenge of ceasing the consumption of animal food products, especially cheese. There were ten references to vegan foods or some vegan foods being expensive or expensive without reason. Six participants answered “none” and one answer was missing.

How to overcome the barriers of being vegan

Introduction and Highlights

The question “How have you overcome the barriers and challenges of being vegan?” directly targeted the vegan participants. Almost all firm non-vegans did not provide answers.

Could-be vegans and especially vegans expressed their views on the basis of three different themes: (1) There are practical ways to overcome the barriers of going vegan such as doing research on nutrition, learning how to cook and choosing vegan-friendly restaurants; (2) there are cognitive-emotional strategies such as cultivating patience and perseverance, minding the suffering of farmed animals and learning not to rely on others’ approval; (3) and there are social strategies such as joining a vegan community, having assertive conversations with non-vegans and becoming an activist.

Most of the non-vegan participants who were not considering going vegan did not answer the question about how to overcome the barriers of being vegan (61 participants). Other firm non-vegans declared that they were not vegan (18 participants) or used the expression “not applicable” (9 participants). Some of the participants in this group wrote about their experience of being vegan in the past. Some others added justifications to their answers, declaring for example that being vegan is unhealthy, or stating “I have some vegan days”, or “I eat very little meat”. These statements may be interpreted as strategies to cope with dissonance, such as the *denial of responsibility* (e.g. the belief that meat is a necessity to the human body) and the *bolstering of identity* (the belief that one does not cause so much harm), since the individual may perceive meat-eating to be a problematic behaviour¹⁹.

A similar pattern was observed amongst the non-vegans who were considering going vegan. In this group, several answers were missing (20 participants) and others declared they were not vegan (14 participants). However, some participants in this group provided descriptions of strategies to overcome the barriers. It is possible that they perceived themselves to be transitioning to veganism and therefore to be able to write about these strategies. Although less numerous and varied, the description of these strategies is similar to what has been observed amongst the vegan participants.

Vegan participants declared that they searched for information on various topics related to veganism and educated themselves. They mentioned research on specific subjects such as how to obtain nutrients, have a balanced diet and avoid certain ingredients. Some of them mentioned social media to be an important source of information, e.g., about recipes, products, debates, advice and the practices of the meat industry. Participants referred to activities like learning how to cook better, doing a cookery course, cooking more at home, batch cooking, repeating good recipes, eating out less, keeping cakes in the freezer, and growing vegetables at home. These practical strategies

included planning ahead when eating out, choosing vegan-friendly restaurants (including one mention of the app *HappyCow*), avoiding restaurants with no vegan options, going to vegan festivals, explaining veganism to caterers, challenging menus, asking for improvised vegan dishes, and self-catering when traveling, in events, parties, at work or at school. Some participants stated that they preferred to eat simple food and learn new tastes instead of trying to imitate animal-derived products whereas others declared to buy (expensive) vegan alternatives. Three participants mentioned health practices like taking supplements (B12, Omega 3) and having annual blood tests.

Some strategies involved the cultivation of emotions and cognitions. Participants declared the importance of patience, perseverance, resilience, dedication, willpower, immunity to social pressure (including “criticism and bullying”), and/or consistency in non-violent behaviour. In accordance with these strategies, participants mentioned, “sheer bloody-mindedness at the start”; “let go of the things you can’t change on your own”; “believing in why I am doing it”; and “being true to myself”. A male participant (age missing) described some practices for dealing with emotions, “I personally stay centred, sane and happy through surfing, yoga, meditation, woodcraft, and a sense of humour”. The cognitions mobilised to overcome the barriers of being vegan included conceiving “justice and compassion” to be more important than food; minding the suffering of animals in the meat and dairy industries; perceiving vegan food to be healthy, energising and rich in new flavours; and seeing progress in the animal rights movement, more support from people and organisations, and more vegan options. They also included perceiving veganism to be “more trendy/popular/mainstream resulting in more accessibility” and having the intuition that it is the “way forward for human evolution”.

The social strategies especially encompassed conversations and interactions with non-vegans. Some participants stressed the need to be kind, empathetic, patient and even humorous when talking to non-vegans about veganism. They mentioned topics of conversations including the motives for going vegan and the variety of vegan food. Others highlighted that they tried to lead by example and challenge the “preconceived notions” about vegans. Participants wrote about inviting friends over, cooking and sharing food with them. It was possible to identify some variations in the strategies that vegans adopted when interacting with non-vegans. Some participants associated negative emotions with these interactions (e.g. stating that one must be “thick-skinned” and “smile at the scorn”) whereas others described positive situations. Some declared to maintain discretion about veganism unless explicitly required whereas others mentioned the need to continuously talk to family and friends. Some said that they did not seek to impose choices on non-vegans whereas others highlighted the need to carry out (street) activism, to educate others and to expand veganism. Finally, the social strategies also included reaching out to other vegans, making vegan friends, and joining communities (including online communities such as *Facebook* groups) “to share issues and solutions”. Five participants said that there were no barriers and five answers were missing.

The cognitions and behaviours mentioned by the vegan participants may also be interpreted as strategies to cope with cognitive dissonance. In this case, the dissonance may occur because of the choice to adopt vegan practices and identity which currently are targets of prejudice and marginalisation²⁰. In this case, one is freely choosing an alternative that may bring harmful and foreseeable consequences to oneself²¹. Yet, this is the alternative that allows vegans to avoid the dissonance related to the consumption of animals. For many vegans, there may be no dissonance, because adopting practices that aim to eliminate animal use and exploitation is regarded as a moral obligation, not a choice.

What would tip participants over into being vegan

Introduction and Highlights

The question about what would lead participants to veganism focused on non-vegans. However, many firm non-vegans did not answer it. Those who provided answers articulated their ideas with the following five themes. Some of them declared that (1) nothing would tip them over into being vegan. For justifying this statement, participants cited personal tastes regarding their diet, health conditions (e.g. coeliac disease), the perception that veganism could harm the environment, and an identity-related stereotype (“vegans are annoying”). Other firm non-vegans described conditions that would lead them to veganism with the themes (2) to (5), as follows:

- (2) Changes in the market and society in general, such as the availability of tasty vegan substitutes, especially cheese; more availability of vegan food in supermarkets and restaurants; and more unprocessed vegan products;
- (3) Changes in personal life (e.g. having a vegan spouse);
- (4) More or different knowledge. Participants declared that they needed “proof” that using animals is unethical and that veganism is better for the environment and human health. (These ideas are discussed in the last topic of this report);
- (5) Personal change (“consciousness”).

Non-vegans who were considering going vegan highlighted the need for personal changes. This seemed to involve embodying the knowledge they already had about the impacts of animal agriculture on animals, the environment and human health. They also emphasised the need for changes in the market and society.

Vegan participants expressed certainty about the benefits of veganism for animals, the environment and human health. Some of them expressed opinions that directly contradicted ideas mentioned by the previous two groups. For them, vegan alternatives and information that supports veganism are already consistently available.

Many non-vegans who were not considering going vegan did not answer the question “what would tip you over into being vegan” (37 participants).

Twenty-two participants answered “nothing”. Some of them provided additional comments, including considerations about preferences. Participants simply stated that they preferred their current diet or liking dairy “too much”. Others evoked medical conditions that they believed would prevent them from going vegan, e.g., having coeliac disease. Some participants wrote about their farming systems which included the waste coming from farmed animals and the practice of eating animals they classified as pests (pigeons and rabbits). Two participants mentioned the idea that veganism is too expensive. One of them deplored what she (age 25) perceived as “huge educational and socio-economic barriers to becoming vegan and a huge culture of shame and blame that neglects financial restrictions of poorer individuals”. One of the participants declared “I don’t believe the

claims behind [veganism]”. Other participants believed that veganism could be “worse for the rainforest” and that it is possible to consume sustainable and ethical animal-derived products. A vegetarian female participant (age 77) declared that she would not go vegan and that vegans are “annoying”.

Other participants in this group cited conditions that would lead them to veganism. These conditions included changes in market and in society in general, such as good (tasty) dairy substitutes, especially cheese; availability of fresh, whole, unprocessed vegan food; more affordable vegan (and organic) foods; more options in supermarkets, cafes, pubs, and restaurants; and a “national strategy to mitigate climate change, and support for farmers to transition into more ethical business”. A female vegetarian participant (age 63) who consumed “organic dairy produce” asserted that the unavailability of this produce would lead her to veganism. Another participant made a similar remark concerning “wild meat”. Two participants mentioned possible changes in personal life, having a “serious health condition” (female participant, age 64) and “it would need my wife to make the same move” (male participant, age 43).

According to other firm non-vegans, more or *different* knowledge would tip them over into being vegan. There were general references to information, such as “a better understanding” or “better advice” as well as references to specific issues such as the impact on the environment, carbon dioxide emissions, “the climate”, and “scientific proof that it would save the planet”. Other participants cited the need to know more about the health benefits of a vegan diet or “finding out that it is our natural healthy diet”. Two participants cited ideas related to animals, e.g., “proof that organic farming for milk is unethical or unsustainable”. It is possible to hypothesize that some participants who cited this theme did not exactly refer to “more knowledge”, but to a certain *embodiment* of the knowledge they already had, that is, a certain passage from *beliefs to action*. For example, in the following answer, “Conscience about harm to animals and need to reduce CO2 emissions from livestock”. This indicates some overlap with the theme of personal change, cited by one participant who wrote, “my conscience”. Three participants made remarks that appeared to manage dissonance with the *bolstering of identity*²² such as, “I am probably 95% vegan” and “I am almost there”.

Compared to what has been described so far, there were some qualitative differences in the answers of non-vegans who were considering going vegan. As could be expected, they did not cite the first theme (“nothing”), and they made more references to possible personal changes. The latter included “changes of habit”, “patience, persistence, progress”, and “willpower”. A female participant (age 69) stated, “animal welfare concerns prey on me and will eventually make me be less lacto ovo, I am sure”. In the trans-theoretical model of behavioural change²³, this could be interpreted as a passage from a stage of pre-contemplation (where normally individuals do not perceive their behaviour to be problematic) to a stage of contemplation (where they are actively considering changing their behaviours).

This group also mentioned changes in the market and society, such as more availability and lower prices of vegan food, better alternatives for butter and cheese, less “food miles” and less “highly processed foods”. A male participant (age 42) declared to support “free-range” animal food products and considered he was in such a way participating in the transformation of the food system. Other answers seemed to imply a large scale societal change that would transform veganism into the prevalent social norm, e.g., a lesser availability of animal food products, more pressure on meat-eaters, “abundance of supermarket vegan products” (what is *normal* must be *highly visible*), more knowledge diffused in society and “more public awareness of the suffering of farm animals”.

Some could-be vegans cited changes in personal life such as having more time, the possibility of growing “my own fruit and veg”, and the cooperation of their families, including the idea that the partner, children or the whole family would have to become vegan. Other participants mentioned the theme of more or *different* knowledge. They referred to more information about health, “science-based information” and recipes. But, again, some answers seemed to refer less to *more knowledge* than to the *realisation* of knowledge (an *embodiment* of knowledge already present). Some examples are, “the realization that eating animal products cause them a huge stress even in organic farming”, “visit to a fish farm or another abattoir”, and “understanding the impact of eating animals and their products”. Ten answers were missing, four participants wrote they were “not sure” and seven that they were “almost there”. A female participant (age 53) seemed to consider veganism to be something exceptional and distant, it “is a whole new level of consciousness”.

As could be expected, most vegan participants did not answer the question of what would lead them to veganism. Forty-one answers were missing, participants answered “not applicable” (n = 15) or “I already am” (n = 15). Other vegan participants provided answers referring to what had led them to veganism or to hypothetical situations in which they were not vegan. In these answers, they mostly cited the already familiar reasons to be vegan related to animals’ rights, the environment and human health²⁴. What sometimes appears to be a question for the previous two groups is, for this group, a certainty, i.e., consuming animal food products promotes unnecessary cruelty against animals (“sentient beings like us”), the destruction of the environment (e.g. the “destruction of tropical forests”), and the presence of risks to human health (e.g. “chronic diseases like heart disease, hypertension, diabetes and obesity”).

It is interesting to notice that other ideas in this group are also in frontal contradiction with themes that characterised the previous groups. Vegan participants perceived that vegan foods are readily available and that the solutions to avoid animal food products are already consistently present in the market and society in general. The presence of veganism in society was also expressed when participants mentioned knowing other vegans, including vegans in positions of authority such as medical practitioners and university lecturers. In contrast with the theme *more knowledge is*

required, vegan participants asserted that all the needed information is already there. The arguments for veganism were already compelling “several decades ago”, according to a female participant (age 68). Some participants cited easily accessible documentaries about animals, health, environment and food practices such as “Cowspiracy, What the Health, Earthlings, Land of Hope and Glory, Forks over Knives”. Other motives for going vegan were the “delicious” vegan food and “caring about more than just myself”. A male participant (age missing) stated, “As a committed ethical vegan NOTHING would tip me OUT of being vegan!”

Arguments against veganism

Introduction and Highlights

Non-vegans who were not considering going vegan cited many arguments against veganism. Their ideas were expressions of five themes:

- (1) Veganism is or may be harmful to the environment. Participants associated veganism to industrialised food, destructive agricultural practices and global warming;
- (2) Is or may be unhealthy. Participants considered that it is impossible to conduct an appropriate vegan diet and associated veganism with processed foods;
- (3) Is unnatural, with ideas such as “we are not herbivores”;
- (4) Its main propositions are exaggerated. Participants believed that the harms to animals are not so severe and that they can be reduced by “humane” animal agriculture;
- (5) May have harmful social consequences, such as creating identity divisions and judgmental behaviours against meat-eaters, and favouring “multi-corporations” to the detriment of “small producers”.

The last topic of this report discusses these ideas. It also presents some of the philosophical and scientific reasons in favour of the main vegan proposition, i.e., avoiding the exploitation of animals.

Non-vegans who were considering going vegan based their answers on the same themes concerning the environment, health and social consequences. For this group, however, veganism was not essentially harmful but could be harmful depending on the way it is carried out.

Vegans also considered that veganism may be detrimental to the environment and human health if carried out incorrectly or carelessly. They were concerned with negative social perceptions of veganism relating it to elitism or aggressive advocacy. No vegan participant considered veganism “unnatural”. Some of them did not write about challenges *to veganism*, but rather about challenges that veganism *must overcome* to be more widespread.

The answers to the question “What arguments do you have against, or what are your concerns about, veganism?” overlapped to some extent with the answers to the previous question about the “barriers or challenges of being vegan”. However, participants focused on different aspects when answering each question. When writing about the barriers and challenges, they highlighted perceptions of difficulties in the experience of vegans. On the other hand, the answers to the question about the arguments against veganism focused on the criticism of veganism itself, its propositions and consequences.

Some of the non-vegan participants who were not considering going vegan mentioned again practical and personal barriers, the ideas that being vegan is not practical or convenient and that it involves abandoning products considered tasty (such as cheese and ice cream). However, the thematic analysis revealed that the main themes here were the following, (1) veganism is or may be harmful to

the environment; (2) is or may be unhealthy; (3) is unnatural; (4) its main propositions are exaggerated; and (5) may have harmful social consequences.

Regarding the environment, participants in this group stated that it is more important to eat “organic”, “free-range” animals, locally produced food and to avoid food waste than to cease the consumption of animal food products. For some participants, veganism is promoting the consumption of food they perceived to be unsustainable such as palm oil, soya and “avocados transported by air”, referring to the impact of airfreight on global warming. Participants associated veganism with the industrial production of processed foods and plastic packaging; with the replacement of pasture for crops that increase the release of carbon dioxide; with the use of fertilisers, pesticides; soil erosion and the destruction of the rainforest. Some of them expressed the idea that farm animals are essential for sustainable or “ecological” agriculture. A female participant (age 63) opposed the “healthy” “mixed organic farms” to the “destructive” industry of “commercialised veganism”. In her perception, the vegan industry is exploiting “the naiveté of the public”. Another female participant (age 54) complained about vegans who are not changing other unsustainable habits such as “flying and driving everywhere”. There was a concern about the pollution caused by “synthetic leather or fibres”. Participants stated, “I would like the discussion to be about sustainable diets not 'veganism'” and, “[veganism is] not the healthiest, most ethical or most climate resilience [sic] diet”. Referring more specifically to the animal abuse issue, participants stated that not all farms are factories and that the existence of farm animals protect their biodiversity.

Participants in this group considered veganism or vegans to be unhealthy. Some of them stated that it is difficult or impossible to have a balanced or varied vegan diet, sometimes citing the lack of specific nutrients such as protein, iron, vitamin B12, calcium, and “omega”. Others mentioned the association of veganism with what they perceived to be highly processed food (e.g. “overly processed fake meat”). Other concerns were that children might be exposed to a nutritional deficit or junk vegan food; that bacteria present in “organic milk” would be important for healthy intestines; that veganism may be a cover for disorders such as anorexia; and that it can cause malnutrition in poorer countries. There is an overlap of this theme with the belief that veganism is unnatural. Participants wrote statements such as, “we are not herbivores”, “[humans have] some role as top predator”, “[veganism] goes against nature”, “it is not evolutionary norm”, “[it is] fundamentally unhealthy”, “[I am concerned with] my body's entrenched and urgent need for ‘proper’ protein”, and “every so often my body needs a good, strong, chunk of beef”. This was associated with the idea that “nearly all [vegans] take some supplements”. There was one mention of religion, “God has permitted us eat everything”.

Some participants considered that vegan propositions are exaggerated. Participants wrote, “some of the animal concerns I feel are overstated”, “I don't regard killing animals as morally wrong”. Some of them believed that the improvement of animal welfare in rearing practices and the reduction of the

consumption of meat and dairy is a more reasonable proposition, suggesting the promotion of “humane” farming, controlling waste and eating less and “organic” meat.

The perception of possible harmful social consequences of veganism included the ideas that “it is a fashion”, a “shallow fad”, and people like it just “because it’s trendy”. It would be something adopted by the “younger generation [...] influenced by social media” who have never had the experience of “farming or gardening first hand”. A male participant (age 81) wrote that “it is more of a unthought-out fad than actually saving our planet”. A female participant (age 73) declared to be reducing the consumption of meat but “not looking for a podium or religion called veganism”. Some participants considered vegans to be “militant” and judgemental “against meat-eaters” and that “the promotion of veganism can be divisive” creating two groups, “them and us”. A 36-year-old female participant expressed the concern that “veganism could become an alternative form of religion with a rise of militancy and great anger towards anyone who does not adhere to its tenets”. A female participant (age 52) placed veganism on the side of “multi-corporations” that commercialised unsustainable food to the detriment of “small producers”. Participants were concerned that farmers may not have the support to change their practices and that veganism would not be possible in other cultures or poorer countries. Seventeen answers were missing, and two participants answered “none”.

Non-vegans who were considering going vegan cited similar themes to the ones described above. However, they expressed their criticism with less negative language and sometimes in the form of questions. The difference is a matter of emphasis. It is possible to say that the first group mainly criticised veganism for being *essentially harmful* whereas this group mainly challenged it because *it may be harmful* depending on how it is enacted.

The health concerns included “junk food”, “over-processed meat and dairy substitutes”, and “nutrition deficiencies”. A male participant (age 42) evoked the belief that veganism is unnatural, “barbecue food (meat) smells delicious and that desire for cooked meat is encoded in our genes put there by God or nature”. The environmental claims were less numerous than health claims. They included the “air miles” of (some) vegan products, and farming issues such as genetically modified organisms, the use of “pesticides, herbicides and fungicides”. A female participant (age 60) wrote, “some wonder what would happen to the animals if we didn't eat them???” Two participants wondered if it would not be enough to propose “meat reduction” or “ethical meat and dairy”. The references to harmful social consequences included statements such as “many dairy and meat farmers feel threatened or angered by it”, “how can dairy and meat farmers diversify?”, “vegans need to be careful of pushing their ideas on people”, and “Is it just a trend?” There were also mentions of the ideas that veganism might be suitable only for developed countries and that it is expensive, with “elitist marketing and pricing”.

Nineteen participants declared they did not have any arguments against veganism. Some of them added statements in support of it such as, “meat-eaters are graveyards of murdered animals”, “ALL need to convert to veganism”, “It’s the Holy Grail for the desire for ethical eating”, and “it’s the only way for the future”. Nine answers were missing.

As could be expected, the vegan participants did not consider veganism to be essentially harmful. But they were concerned about specific situations in which the practice of veganism may bring about harmful consequences for human health, the environment and society. No vegan participant cited the idea that veganism is unnatural. Some participants in this group did not highlight the *arguments against* veganism but rather the barriers that must be overcome to encourage its expansion.

Concerning human health, vegans stated that people should avoid “fast food veganism”, mainstream processed foods, “heavily processed meat substitutes”, pesticides, and buy more organic foods. One of the participants wondered if vegans need supplements and another one was concerned about the nutrition of vegan babies. Participants cited concerns with nutrients and one of them stated, “but this is specific to any diet and not just veganism”. The criticism regarding possible harmful consequences to the environment included already cited elements, such as palm oil, soya, “the destruction of tropical forests”, unsustainable packaging, unsustainable fashion, and food “air miles”. Two participants wondered if farm animals are essential to good agricultural practices and farming rotation.

In this group, most of the criticism towards veganism had a social character. Participants were concerned about the “reputation” of veganism, that it may be “too fashionable”, a “shallow fad”, that it would require more thinking, and that celebrities might be influencing youngsters to adhere to a “fad diet”. Two other types of negative images were cited. Society may perceive veganism to be a “middle-class luxury” and/or vegans to be “extremists”. Participants considered that vegans may be “too judgemental” against meat-eaters, that “[veganism] cannot be imposed on people”, “militancy” may be making others “resistant to change”, and vegans should use “better language so others understand instead of antagonize veganism”. Three participants directly cited the perception of “elitism” and that veganism may not be accessible to underprivileged people. There were other beliefs concerning social aspects such as that the demand for vegan products may be subject to economic exploitation, the vegan movement may be depoliticized, there are few scientific publications about the benefits of veganism, and there is a need to support farmers transitioning to other practices.

The theme of the challenges that veganism must overcome was specific to the vegan participants. Participants cited the ideas that there are not enough vegans, the consumption of animal food products is still on the rise, many meat-eaters have emotional bonds to meat and fiercely resist veganism, there is not enough time to convince everyone in order to prevent climate problems, “and

animals and the environment will continue to suffer". They also mentioned the beliefs that people should have information on how to plan their diets and veganism should promote sustainable foods.

Twenty-six participants answered that there are no arguments against veganism and some of them provided additional comments. A male participant (age 32) for example added, "None. How can you argue against something that is more environmentally sustainable, prevents the unnecessary torture and slaughter of over 56 billion land animals a year and over 2 trillion sea creatures a year, whilst also being healthier for you?" Thirty answers were missing, and two participants wrote "not applicable".

Desired information about veganism

Introduction and Highlights

The three common themes identified in the answers to the question “what information would you like about veganism?” are: (1) Ethics (treatment of animals and environment and sustainability concerns); (2) Health (diseases and nutrition concerns) and (3) Lifestyle (information about practicalities, products and people, such as vegans in general, vegan activists and celebrities). These three themes were present throughout the answers. However, there are some differences amongst the groups of participants regarding negative and positive attitudes towards veganism.

Firm non-vegans asked for information about the possible negative impacts of veganism on the environment and human health. On the other hand, could-be vegans and vegans asked for information that could confirm the positive consequences of veganism for animals, the environment and human health. They also highlighted the need for practical information on the transition to veganism, nutrition and recipes. Some vegan participants desired information on how to become better advocates for veganism.

The ethical interest of non-vegans not considering going vegan centred on information regarding the sustainability of vegan farming and the environmental effect of importing plant-based foods. Their responses suggested cynicism about the sustainability of vegan farming. For example, one participant asked “is soya really ever sustainable if eaten by a large percentage of the population, (and therefore requiring significant landmass on which to grow?)”, another participant asked “How does one make those impossible ethical and moral choices about the source of vegan products – soya production being a good example”.

The participants interested in receiving more health information typically asked for more information on nutrition and supplement use. One participant asked, “How not to use supplements”. There was a tone of scepticism and perhaps the suggestion of inadequacy as a reason to justify their diet. Participants also expressed an interest in receiving more information around comparisons of general health outcomes of different diets. A participant asked, “Whether it is actually a healthier diet and vegans are actually healthier”. Some responses from these participants expressed the opinion that a vegan diet may be inferior. A participant wrote, “Articles condemning processed vegan meat substitutes that are promoted in favour of real organic meat”. The main concerns centred on nutrition, supplement use and the presence of vitamins and nutrients, “what does a balanced healthy vegan diet consist of/look like?” and “How to manage health – where to find b12, magnesium etc. easily”.

Some firm non-vegans expressed an interest in practical lifestyle aspects of veganism such as cooking information. This centred on the need for recipes, particularly using locally sourced ingredients. A participant stated, “There needs to be more emphasis on local produce and how to create nutritious

meals using locally sourced ingredients”. Four participants expressed an interest in general lifestyle information. One participant suggested “non-food veganism”, another wondered “who” and “where” vegans are. Two participants wanted information on the effect that a vegan lifestyle has on animal welfare. One participant wondered “How veganism helps animal welfare and Environment”. In this group, forty-one answers were missing, five participants answered, “none” (they did not desire any further information), six felt they already had adequate information.

Non-vegans considering going vegan also expressed interest in receiving ethical information. This interest was predominantly centred on environmental and sustainability information. This group were typically interested in the sustainability of vegan farming practices, “answering the critique I keep hearing, that vegan farming is not sustainable, that we need animals for a complete sustainable cycle. I don't believe that is true, but I need some facts to argue this”. There were similar concerns raised about the farming of foods such as soya and palm oil. One participant asked, “Is synthetically grown meat (in vitro) considered vegan?” This group expressed an interest in further information about the treatment of animals by industry and the impact a vegan lifestyle has on animals. However, this interest was not as common as it was in the answers from vegan participants and was not a typical interest amongst this group.

Could-be vegans also communicated an interest in receiving further information regarding the health implications of veganism. They also expressed an interest in nutrition and how to obtain required nutrients and vitamins, namely B12, iron and calcium. However, these responses were framed in a more constructive tone. The participants were interested in finding out how they could do this and did not seem to suggest that they thought it was not possible or would be nutritionally inferior. Participants also demonstrated an interest in further age-specific (“veganism for all stages of the life cycles”) or gender-specific (“Veganism affects some women differently than men”) health information.

Could-be vegans expressed a notable interest in lifestyle information such as practical cooking information, typically convenient and nutritious recipes. A participant stated, “More recipes using easily available ingredients always welcome”, and another participant asked for “recipes that don't rely on unusual imported ingredients”. This group also expressed an interest in practical lifestyle information such as transitioning to veganism. One participant asked for further information on “How to have a healthy diet that doesn't have dead animals/birds/fish in it”. Another participant asked, “how to switch in a responsible fashion”. Participants in this group also expressed an interest in information such as “A dedicated website devoted to new vegan products and a weekly email update”. Another participant expressed an interest in information on “What is like (or would be like) being vegan in other cultures or traditions (other points of view)”. In this group, three participants answered “none” (they did not desire further information), seven participants felt they were already adequately informed, and twelve answers were missing.

Amongst the vegan participants, there was an expression of interest in receiving further information on ethical environmental issues. However, this was typically a request for practical information. For example, a participant expressed an interest in information on “the transition to arable farming and what is required”. The information sought was also about presenting what vegan participants considered “factual” information. One participant answered, “I would like to see correct facts published on all the key relevant issues, but particularly those where most misinformation still prevails, for instance: Land use”. Another participant requested information on the “Comparative effects of vegan vs other diets on the environment”. Further, participants expressed an interest in receiving information on the treatment of animals by industry, but it is clear from the tone of their responses that this information would not be for the benefit of the industry. For example, one participant answered, “I do not need any for myself but I would like people to know how animals are 'produced' for consumption, the abuse, fear and pain they suffer. We, as humans, should not be doing this”. Another participant stated, “How farm animals are actually treated – not just on intensive farms (though this is crucial) but also on organic ones + slaughterhouses etc.”.

Vegans also desired information on health and nutrition. Participants suggested this should be “honest” information and for the benefit of those who are unaware, not so much for themselves. For example, one participant asked for “more honest information on newspapers and/or non-vegan magazines about the fact that veganism (according to several academic papers) is safe for all stages of life when done well”. Participants also mentioned nutrition advice and information on supplements and diet planning. A participant suggested, “People need to know about having a balanced vegan diet. Just cutting out animal products doesn't guarantee good health”. Another participant requested information on “veganism for athletes”. Vegan participants also expressed an interest in feeding animals plant-based foods, “How to feed a pet animal or, indeed, a wild carnivore such as a fox”.

Similarly to the other two groups, the vegan participants desired practical lifestyle information. This information mainly addressed concerns over transitioning to veganism and supplying practical recipes. Regarding transitioning, one participant expressed interest in “Something positive to share with omnis [omnivores] to help them make changes”. This participant suggested that transitioning information is usually “cumbersome/disjointed/fragmented”. Another participant stated it would be of interest to have “all the practical tips for how to transition”. Participants also expressed interest in practical cooking information. The common theme amongst these recipe requests was for them to be “Simple and nutritious recipe ideas”.

Vegan participants expressed an interest in receiving further general lifestyle information such as product information and information about the perception of veganism and how to present and communicate veganism in a positive light to others. A participant asked, “How to make veganism the

most popular trend”. Another participant stated, “I am always keen to learn how to be a more effective vegan advocate”. One participant requested “New vegan products. Major news”. Another participant wanted information on “where vegan is a way of life”. Nine participants answered, “none” (they did not desire any more information) and forty-four answers were missing. This large number of missing answers is perhaps due to the vegan participants feeling adequately informed on these issues.

Desired feature articles about veganism

Introduction and Highlights

The question “What feature articles would you like to see in our vegan issue?” referred to future publications of the magazine *Resurgence & Ecologist*. The answers overlapped with the previous topic about the desired information on veganism. The same three themes were identified: (1) Ethics (treatment of animals and environment and sustainability concerns), (2) Health (diseases and nutrition concerns), and (3) Lifestyle (practical information, product information and people). The three investigated groups expressed the same patterns of negative and positive attitudes towards veganism.

The detailed description of the answers to the present question may provide interesting nuances on the participants’ perceptions. Amongst the non-vegan participants who were not considering going vegan, there was an interest in ethical articles regarding the environmental impact and sustainability of vegan farming practices. For example, one participant requested an article on “The environmental impact of vegan ingredients on the environment”. A further participant asked for “Balanced perspectives of veganism against more sustainable forms of meat-eating diets”. Participants conveyed concerns and scepticism over the sustainability of vegan farming practices and cited what they considered to be various harmful practices. For example, “Also please cover packaging and marketing techniques (lots of plastic, palm oil ingredients, buzz words like 'natural' unregulated, etc.)”. Another participant asked for articles on “Sources of food and environmental impact, e.g. which foods come by air, which are grown locally but with a lot of heating in greenhouses”. One participant stated, “Some proper information about regenerative agriculture & the vital role of ruminant livestock in creating fertile soils with a focus on microbes, roots & exudates. Truth about what ploughing vast areas of land for sowing mono-crops is doing to our environment”. Another participant asked for “Articles on rewilding, sustainable farming practices, agroforestry – or any other alternatives to 'just eat plants'”.

This group also expressed an interest in receiving articles that investigate the treatment of animals by industry. A participant asked for articles that “Focus on the poor standards of animal welfare in the USA”. Another participant asked for an article showing the “best practices” of UK egg and dairy production. A further participant expressed an interest in articles on “welfare-friendly production of meat and fish”. The tone of these answers suggests participants wanted to see articles that portray UK animal farming in a positive light. Most answers from these participants conveyed the opinion that non-vegans not considering veganism feel the treatment of animals by industry is misrepresented. For example, “And let’s have some truth about conditions for slaughtering livestock in UK in the few remaining small abattoirs – totally stress-free handling, good stun & death very quickly while animal still unconscious. I know because I've stood there while my sheep have been slaughtered”.

Firm non-vegans also expressed an interest in articles about health and nutrition. “The protein issues” was a concern amongst some participants. Another participant asked for articles that “compare protein levels against other sources (and how much do you need?)”. The tone of some responses was once again cynical, with participants expressing opinions about the supposed inferiority of a vegan diet and desiring articles that investigate this. For example, one participant asked, “Please examine all the fake meat products like Quorn and tofu”. However, some participants did express an interest in receiving practical nutrition and health articles, such as articles examining the “nutritional adequacy especially for children and the poor and what about nut allergies”. Another participant asked for “facts about the healthiness of vegans”.

Some firm non-vegans requested articles about nutritious and convenient recipes. For example, one participant asked “How to eat a balanced diet with all necessary minerals and vitamins. Some recipes maybe”. Another participant stated, “I work a 12hr shift and it’s difficult to plan meals”. A further participant asked, “Is there a way in which I could make bigger inroads into my meat consumption without imposing it on my wife or making two separate meals”. Despite identifying as not considering going vegan, some participants expressed an interest in practical information regarding transitioning to veganism, for example, “info for the beginner vegan”. Another participant asked for an article explaining “why” people would want to be vegan. Articles on general lifestyle information that interested this group centred on products. For example, “something incorporating British produce” or “plant-based meats coming to market”. One participant answered “none”, two participants expressed the wish for articles that looked at the “whole spectrum” and “the shallowness of veganism” and forty answers were missing.

Non-vegans considering going vegan also expressed an interest in receiving articles relating to the environmental impact of veganism and the sustainability of vegan farming. Participants asked, “How much it could help reduce environmental impact”, and “How is it linked to climate change”. Some participants expressed opinions that suggested they felt vegan farming is more environmentally friendly and would like to see articles explaining comparisons of different practices. However, some answers still expressed some scepticism from participants. For example, one participant requested an article examining the impact of veganism on agriculture, expressing concerns over the “the growing of crops in monoculture” and how this could “reduce biodiversity”, which could result in “mass starvation”. Participants also expressed interest in articles explaining the practicalities of the UK shifting to widespread vegan farming.

Regarding the ethical issue of animal use and treatment, participants differed from non-vegans not considering veganism in their approach to these articles. Could-be vegans requested articles on the exploitation of animals, on the fact that an ethical position regarding animals is the main reason for going vegan and on “the potential for a future utopia”. They also mentioned themes such as practical

information about the treatment of animals, the use of antibiotics, and “Carniveganism²⁵ (sometimes eating wild meat) – pros and cons for health, the animal and the world”.

There were also requests from this group for health and nutrition articles. Many of the articles requested were practical. For example, age-specific and gender-specific articles explaining “bringing up a vegan baby”, information from “birth to senior”, “Veganism and women's health”, and “how to get protein and calcium without dairy and eggs”. Non-vegans considering going vegan expressed a notable interest in lifestyle articles. An important topic amongst these requests was an interest in articles on practical cooking information and practical information on transitioning to veganism. Participants asked for “how-to” articles, “how to put meat out of your head” and how to “shift consciousness and embrace veganism”. Other suggestions mentioned “realistic gardening” and veganism for “low-income families and individuals”. The request for recipes centred on meal planning, such as recipes for a “weekly diet”, “simple and quick recipes”, and “basic foods/ recipes. Not the expensive foods”.

The general lifestyle articles requested by this group centred on vegan people, such as “[vegan] community successes”. Participants asked for “other points of view [...] not only high developed and urban”, “successful stories for people and the planet”, “vegans from all walks of life and what they do, how they live”, “the differences between vegetarian and vegan”. A further participant asked for “An article (or articles) exploring the idea about the resistance to veganism and why – with a world-wide slant”. Some participants also expressed an interest in articles on vegan products. Fifteen answers were missing from these participants.

Vegan participants made a lot of article suggestions and demonstrated an interest in the covering of many ethical, health and lifestyle areas. Participants expressed an interest in environmental and sustainability articles, with topics such as, “I'd like to see feature articles about the environmental impacts of a vegan diet vs. vegetarian vs. omnivore, with credible scientific data”, “how adopting a vegan diet helps to address a huge range of interconnected environmental and social problems”, “low impact” plant-based foods, and “links between multinationals plastic waste and vegan products”. Participants also asked for articles on practical environmental matters such as, “How are we going to move to a plant-based food system” and how farmers can make the transition.

The responses of vegans suggest that the majority of the articles they requested would not necessarily be for their use but rather to inform those considering veganism and to debunk what they considered to be false or misrepresented information. For example, a participant asked for articles on “why wholefood veganism is the healthiest diet” and another on “what a meat diet can do to the body”. Participants also suggested articles on age-specific health information (“for the over-70s”) and plant-based pets.

There were many practical lifestyle article requests from this group. Some of the participants suggested information that may be useful for those transitioning to veganism, such as “First steps to being vegan and top tips for new vegans”. Participants also expressed the need for transitioning articles to be suitable for families. For example, one participant asked for “How to create a new vegan lifestyle. A set of go-to recipes like that exist in every family”. Many participants requested recipe information. Participants most commonly asked for recipes to be convenient and nutritious. There were also some specific requests such as “recipes for [vegan] cheese”.

This group also provided many requests for general lifestyle articles. These articles predominantly concerned vegan products, creating positive perceptions of the vegan lifestyle and “interviews” with vegan people. Participants cited “Vegan celebrity sports star interviews (role models)”, “extraordinary people”, “inspirational stories”, “transitional stories”, and “early pioneers of veganism”. Regarding vegan products, there were mentions of “sustainable vegan fashion”, “cosmetics/brands (affordable!)” and “the need for supermarkets to be much more vegan-friendly”.

Vegan participants were also interested in articles that would present positive perceptions of veganism, “how a vegan lifestyle ticks so many positive boxes” and “why being vegan is not ‘extreme’, it’s just a natural and kinder way to live”. Participants also asked for articles on activism. The responses indicated an interest in both success stories as well as guides and tips on how to be an effective animal rights activist. For example, one participant asked for a practical article on how to “gently influence others to become vegan” and another one for “In-depth articles on the issue of animal rights and animal resistance”. One participant answered “none” and twenty-five answers were missing.

CONCLUDING REMARKS AND RECOMMENDATIONS

The results reported here provide insight into contemporary perceptions about veganism. The analyses have shown important differences amongst the investigated groups, highlighting positive and negative attitudes and beliefs about veganism. Knowing the characteristic positions of vegans and non-vegans can provide a useful basis for dialogue with these groups and for the interventions of health and social-welfare professionals interested in the potential of veganism for promoting change.

For most vegan participants, veganism seemed to be a simultaneously joyful and difficult experience. In the participants' perceptions, veganism is joyful because it produces positive consequences for the environment, human health and, most importantly, animals. It is also a rewarding experience because it may engender empowerment, possibilities of influencing people and changing society. Vegans described veganism as a transformative experience, which generates new ways of consuming but also new ways of *being* and relating to others. Hence, it is an experience that may produce strong effects on identity.

According to some vegan participants, veganism is difficult because it involves witnessing the suffering of animals and feeling incapable of completely ceasing their exploitation. Hence, it may be a complex affective experience simultaneously characterised by impotence and empowerment. It is also the experience of being part of a minority group and, in some cases, trying to change the majority. Vegan participants were concerned about social stereotypes attributed to vegans. Some of them reported social barriers to veganism including ostracization, bullying and abuse. It is important to highlight here some of the legal protections for veganism currently in place in the United Kingdom.

The moral beliefs of vegans are protected under the law, which means vegans also receive protection for the lifestyle requirements that arise as a result of their beliefs. The primary human right that provides vegans with protection under the law is the right to freedom of conscience. Under the Human Rights Act 1998, it is unlawful for a public authority to act in a way that is incompatible with a convention right. This means that public authorities must take the beliefs of vegans into account. For example, when working in the public sector, vegans should be provided with vegan alternatives when food is provided. Moreover, state schools are expected to respect vegan beliefs and if attending a state school, vegans are also protected from being required to carry out any activities that would sit in opposition to their beliefs.

Further to the protection of veganism in the public sector contained in the Human Rights Act 1998, the rights of vegans are protected under the Equality Act 2010. This Act provides broader legal protection for "protected characteristics" in various contexts, including employment, education and association membership. Veganism is a protected characteristic, falling under the category of

“belief”. This means that an individual cannot be discriminated against directly or indirectly for being vegan and it is unlawful to harass or victimise them in relation to their beliefs.

It is possible to argue that the beliefs and attitudes described in this report are not isolated elements but in fact participate in networks of meanings for constructing *theories of common sense* about veganism and vegans, i.e., social representations²⁶ of veganism.

It is particularly interesting to consider the connections of beliefs held by participants who expressed negative attitudes towards veganism²⁷. Social representations often include a belief in a *hidden agenda* or *conspiracy*²⁸. In this case, veganism is depicted as a new and shallow “fad”. It is proposed by “multi-corporations”, unsustainable processed-food industries and celebrities. These actors “influence” people, notably the “younger generation”, “by social media”, to attain their objectives (arguably money and fame). They exploit “the naiveté of the public”. Consequently, many individuals become vegan and very firmly adhere to a rigid set of principles, treating veganism as a “podium or religion”. According to this view, this has dire consequences. Since veganism would be “unnatural”, vegans are unhealthy, develop “nutrition deficiencies”, are obliged to take supplements, harm their children and/or hide their “anorexia”. In the social domain, veganism is described as “divisive”. It would also concentrate money and power in the hands of the “multi-corporations” to the detriment of “small producers”.

In these social representations, the environment is the greatest victim of veganism. For example, vegans are seen as avid consumers of palm oil and soya, the production of which destroys many ecosystems. “Irresponsible vegans” are “importing unseasonal food” (e.g. avocados), and the food airfreight generates the emission of greenhouse gases. These representations associate veganism with fertilisers, pesticides, herbicides, fungicides, genetically modified organisms, soil erosion and the “destruction of the rainforest”. The vegan food industry is perceived to be destructive, as well as their use of plastic packaging. Vegans would be causing pollution with “synthetic leather or fibres” and would not be willing to change harmful behaviours such as “flying and driving everywhere”. This perception concludes that “the discussion [should] be about sustainable diets not ‘veganism’”. Even animals are possible victims of veganism because the existence of farm animals (“to raise them to be eaten”) would protect their “biodiversity”.

It was mainly the non-vegans not considering going vegan who held these perceptions. Their beliefs can be understood as a *counter-attack*. In recent years, the consumption of animal-derived products has been strongly associated with the destruction of the environment and veganism has been presented as a solution²⁹. Directly or indirectly, this kind of information has conveyed the message that *it would be impossible to be environmentalist and not be vegan*. It is interesting to remember that the participants in this group mainly considered the environment as a reason for orienting or changing their diets (answers to question 3). These *non-vegan environmentalists* are particularly likely

to experience cognitive dissonance when exposed to information about the environmental damages caused by the consumption of animal-derived products. Cognitive dissonance either leads to a change in behaviour (in this case, going vegan), or to the transformation and addition of cognitions³⁰. It is possible to argue that dissonance was a powerful driver for the construction of the described representations of veganism, anchored in the social thinking of this group as a “threat to the environment”³¹.

Researchers have used the term *Vegaphobia* to refer to discourses and strategies to derogate veganism and vegans³². A study of British newspapers found that these strategies correspond to ridiculing veganism, portraying veganism as asceticism, impossible to sustain and as a fad, and depicting vegans as oversensitive and hostile³³. Crucial to these strategies was avoiding mentions of the main practice challenged by veganism, i.e., the violence that humans perpetrate against animals. Such discourses have the effects of marginalizing vegans, preventing non-vegans of coming into contact with veganism, and perpetuating the exploitation of animals³⁴. The suffix *phobia* (evoking fear and anxiety) is consistent with the experience of cognitive dissonance that the contact with veganism may induce³⁵. Ridiculing veganism is a way of justifying *speciesism*, i.e., the discrimination of sentient beings according to their species.

The “4 Ns” are the main beliefs that individuals use to justify the consumption of animal-derived products, which would be *necessary, natural, normal* and *nice*³⁶. Participants in this survey used these justifications. For example, the consumption of animal-derived products would be necessary for maintaining a balanced diet and good health, it would be natural because it was the behaviour of human ancestors, it would be normal because of the cooking traditions and options normally found in supermarkets and restaurants, and it would be nice because of the taste of meat or cheese. Participants asked for information about veganism in such a way that would confirm their extant beliefs and attitudes. This is consistent with the expected tendency of individuals to avoid sources of cognitive dissonance³⁷.

Of course, the adherence to the described representations and justifications was variable. In addition, it is important to remember that most participants of the survey generally expressed positive attitudes towards veganism, declaring themselves vegan or considering going vegan. Participants may have held some of the mentioned negative beliefs and not others and with different magnitudes. Even amongst non-vegans not considering going vegan there were expressions of positive attitudes towards veganism. For example, participants in this group cited joys of being vegan, motives that could tip them over into being vegan and requested information about practicalities of veganism. This is not negligible. Individuals in this group may be sensitive to claims to reduce or cease the consumption of animal-derived products. The dialogue about veganism with this group should consider their use of mechanisms to deal with cognitive dissonance and their social representations of veganism.

Veganism is an undertaking in favour of animals. The exploitation of animals for food, clothing, entertainment, in scientific experiments, and the development of drugs and cosmetics ignore their rights and cause them unnecessary suffering and death³⁸. Research has shown their capability of suffering, already widely acknowledged in common sense. J. Thelander summarises the scientific findings, “Today, we know that animals – at least mammals and birds, which are the most commonly studied – have feelings and emotions just like humans do. They have the ability to think, and even plan for the future. They have needs and desires, they play and learn from one another, not to mention their ability to communicate”³⁹. Nevertheless, according to an estimation by Compassion in World Farming, “the number of farm animals reared for food globally has risen from 60 billion a year to just over 70 billion. Two out of three farm animals are now reared intensively”⁴⁰.

Unlike vegetables, animals are *sentient beings*, capable of the experiences of pleasure and pain, and their interests must be considered⁴¹. Killing animals for food, even if they have lived a happy life, is wrong. Independently of their level of sentience, they have the interest of maintaining their lives, which is a necessary condition for their well-being⁴². Animals are *subjects of a life*, who have inherent value⁴³. Participating in the consumption of their bodies reinforces cultural processes of social dominance that also objectify and fragment humans on the basis of gender and ethnicity⁴⁴. Common practices of the meat, dairy and egg industries are actively hidden from the public eye because they would generally be considered serious atrocities⁴⁵. Animal rights groups have shown that animals reared in settings labelled as “organic” or “free-range” are also subject to significant harm, stress, mutilations, and confinement⁴⁶.

A vegan diet is healthy for all stages of life, including babies, toddlers, older adults and pregnant women. This is the position of the British Dietetic Association and the American Academy of Nutrition and Dietetics⁴⁷. The diet must be well planned like every other diet and there is no need to include industrialised or processed foods⁴⁸. The only missing nutrient is vitamin B12. The need for supplementing vitamin B12 does not mean that the vegan diet is “unnatural”. This vitamin is produced by bacteria (not animals) and its scarcity is due to the modern lifestyle and urbanisation (traditional communities may ingest this vitamin through non-sanitised vegetables). Non-vegans in a modern lifestyle are also supplementing B12 but, in this case, using animals’ bodies as the *middleman*, because farmed animals receive the supplementation during the rearing process⁴⁹.

According to H. Godfray and colleagues, several studies have verified the association of plant-based diets to less morbidity and mortality. On the other hand, according to the same authors, there is considerable evidence that meat consumption is associated with various important diseases such as colorectal and stomach cancer, heart disease and diabetes, as well as with increased mortality. In addition, the antibiotics widely used in the rearing of farmed animals may generate resistant pathogens that can infect humans⁵⁰. The authors also refer to the economic power, lobbying and

political impact of the meat industry, which may have influenced, for example, the elaboration of the American Dietary Guidelines⁵¹.

The United Nations Food and Agriculture Organisation (FAO) states that animal agriculture is a leading cause of environmental degradation, deforestation, pollution, land use, and water consumption⁵². It is the most important cause of the destruction of the Amazon rainforest, which is cleared to make space for grazing cattle or for soya plantations to feed to cattle⁵³. A recent review discovered that “deforestation for agriculture is dominated (67%) by feed”⁵⁴.

According to the FAO report, “In all, livestock production accounts for 70 percent of all agricultural land and 30 percent of the land surface of the planet”⁵⁵. The report states, “Among the cereals, maize and barley are used mainly as feed – more than 60 percent of their total production over the 1961 to 2001 period” (FAO). It is misleading to associate the destruction caused by the soya monoculture to “vegan fake meat” or “tofu”. The boom in the production of soybean is caused by animal feed demand: according to the FAO, “more than 97 percent of the soymeal produced globally is fed to livestock”⁵⁶. Soil degradation with the intensive use of fertilisers and pesticides in monocultures destined to feed the animals is one of the mechanisms of land degradation related to the animal industry⁵⁷.

Regarding the emissions of greenhouse gases, T. Thornes explains that “Two thirds of agricultural greenhouse gas emissions are indirect emissions resulting from land-use change, fertiliser production and fuel used to grow and transport crops. Farming animals, as opposed to eating crops directly, exacerbates all these emissions sources”⁵⁸. “On average, to produce 1 kg protein from farmed animals, 6 kg plant protein are required”⁵⁹.

The United Nations FAO demonstrates that animal agriculture is one of the global leading causes of greenhouse gas emissions⁶⁰. In a recent report, the United Nations Intergovernmental Panel on Climate Change recommended the reduction of meat consumption⁶¹. Climate change may cause species extinction, mass human migration and wars over scarce resources. Animal agriculture is responsible for the emission of greater amounts of greenhouse gases than the whole sector of transportation⁶², including cars, buses, trains and the frequently cited airfreight.

Emissions of methane to the atmosphere significantly contributes to global warming⁶³. The rearing of cattle through grazing (labelled “organic, free-range, or grass-fed beef”) generates up to four times more methane emissions than under feedlot conditions⁶⁴. Methane is a more potent greenhouse gas than carbon dioxide⁶⁵. This raises the question of the so-called “grass-fed beef” causing more greenhouse gas emissions than its ability to mitigate it. The Food Climate Research Network (FCRN) based in the University of Oxford released a report showing that the grazing system and “grass-fed

beef” are not contributing to reducing greenhouse gas emissions⁶⁶. They are in fact aggravating climate change like the entire sector of animal agriculture.

The comprehensive review published by J. Poore and T. Nemecek in the journal *Science* highlights the importance of transitioning to a diet free of animal food products, for preventing further damage to the environment. The authors show that animal-based foods provide only 37 per cent of worldwide consumed protein and only 18 per cent of calories while using 83 per cent of the global farmland and causing 56 to 58 per cent of global greenhouse gas emissions related to food⁶⁷. In the authors’ words, “a diet that excludes animal products has transformative potential, reducing food’s land use by 3.1 (2.8 to 3.3) billion ha (a 76% reduction), including a 19% reduction in arable land; food’s GHG [greenhouse gas] emissions by 6.6 (5.5 to 7.4) billion metric tons of CO₂eq [carbon dioxide equivalent] (a 49% reduction); acidification by 50% (45 to 54%); eutrophication by 49% (37 to 56%); and scarcity-weighted freshwater withdrawals by 19% (-5 to 32%) for a 2010 reference year”⁶⁸.

Concerns that non-vegan environmentalists expressed in the survey reported here are of paramount importance, e.g., the environmental harms caused by greenhouse gases, fertilisers, pesticides and plastics. It is possible to conclude that veganism may be empowering for them. Non-vegan environmentalists may discover that veganism allows them to do even more for the environment. Vegans, on the other hand, may gain more awareness about their practices and enhance their environmental contributions. This may involve further changes in their consumer behaviour, being socially active and participating in environmental and animal rights advocacy groups. Meat production and consumption are still on the rise. The use of animals for clothing, entertainment, scientific experiments and product tests is not over. There is a lot to be done for the animals and the environment.

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NOTES

¹ Hancox (2018). See also the statistics on the Vegan Society website,

<https://www.vegansociety.com/news/media/statistics>. According to the cited sources, “The number of vegans in Great Britain quadrupled between 2014 and 2018”.

² Godfray et. al (2018). “Meat” is the word commonly used to avoid the reference to animal flesh. It participates in mechanisms of psychological dissociation (Adams, 1994/2018). The authors of this report acknowledge the importance of language for the present debate.

³ The Vegan Society. Retrieved from <https://www.vegansociety.com/go-vegan/definition-veganism> on the 24th of October 2019. Being vegan is commonly mistaken for simply adopting a plant-based diet. According to the definition provided by the Vegan Society, a vegan also seeks to exclude animal exploitation in scientific experiments, for entertainment, clothing, testing of products, and any other use.

⁴ In this report, non-human animals are referred to as “animals” for concision.

⁵ Linzey & Linzey (2019).

⁶ A systematic approach to thematic analysis was adopted, according to the recommendations of Braun & Clarke (2006) and Terry, Hayfield, Clarke & Braun (2017).

⁷ The total number of participants was 277, but eight participants did not answer the first two questions and were not considered in this report.

⁸ Standard deviation = 16.05. The age was missing in 33 cases.

⁹ It is important to consider that the procedure of self-classification may not be accurate. The Vegan Society states, “one thing all vegans have in common is a plant-based diet avoiding all animal foods such as meat (including fish, shellfish and insects), dairy, eggs and honey – as well as avoiding animal-derived materials, products tested on animals and places that use animals for entertainment”. Participants may have self-classified as vegans whilst not completely adopting these practices.

¹⁰ Animal Welfare per group: $\chi^2 = (2, N = 269) = 16.32, p < .001$. The following table shows the observed and expected counts for the two alternatives that participants had (yes = indicate the reason; no = do not indicate the reason). Concerning the two other reasons (Health and Climate Change), the same type of comparison did not yield significant results.

		Indicated Animal Welfare as a reason for changing diet	
		Yes	No
Firm non-vegans	Observed count	52	38
	Expected count	65.6	24.4
Could-be vegans	Observed count	49	15
	Expected count	46.6	17.4
Vegans	Observed count	95	20
	Expected count	83.8	31.2

¹¹ Each group was dichotomized into two subgroups concerning each reason, (1) participants indicating and (2) not indicating the reason, allowing chi-square (χ^2) analyses. The null hypothesis was that 50% of the participants in each group would indicate each reason. The following table shows the observed and expected counts, chi-square and p values. In all groups, the frequency of participants indicating each reason for changing their diets was greater than the frequency of participants not indicating it. However, no significant differences ($p < .05$) were found amongst firm non-vegans concerning either *Health* or *Animal Welfare*.

		Indicated the reason				
			Yes	No	χ^2	p
Firm non-vegans	Health	Observed count	53	37	2.84	.092
		Expected count	45	45		
	Climate Change	Observed count	62	28	12.84	< .001
		Expected count	45	45		

	Animal Welfare	Observed count	52	38	2.17	.140
		Expected count	45	45		
Could-be vegans	Health	Observed count	44	20	9.00	.003
		Expected count	32	32		
	Climate Change	Observed count	48	16	16.00	< .001
		Expected count	32	32		
Animal Welfare	Observed count	49	15	18.06	< .001	
	Expected count	32	32			
Vegans	Health	Observed count	75	40	10.65	.001
		Expected count	57.5	57.5		
	Climate Change	Observed count	83	32	22.61	< .001
		Expected count	57.5	57.5		
	Animal Welfare	Observed count	95	20	48.91	< .001
		Expected count	57.5	57.5		

¹² Vegans are a minority group and there is considerable opposition to vegan ideas and practices (Cole & Morgan, 2011; Bastian & Loughnan, 2017; Vandermoere et al., 2019). Therefore, the group of non-vegans who were not considering going vegan might represent a large proportion of the general public. However, the group included in this report had important qualitative specificities. They were subscribers to the newsletter of The Ecologist and were likely to have special concerns about the environment and detailed information about various topics concerning the environment. Hence, the results must be considered in light of these specificities.

¹³ Festinger (1957); Cooper (2007); Bastian & Loughnan (2017).

¹⁴ Joy (2010); Bastian & Loughnan (2017).

¹⁵ Joy (2010).

¹⁶ According to Joy (2010), the main justifications for the consumption of animal-derived products are the beliefs that they are *necessary* (e.g. essential to the human body), *normal* (e.g. compulsory because of tradition) and *natural* (e.g. characteristic of the human species). The author shows that the same justifications were and are used in support of other kinds of oppression like racism and sexism.

¹⁷ Joy (2010) discusses the experience of *witnessing*.

¹⁸ Three participants who self-classified as vegans admitted having eaten non-vegan food because of such practical barriers. One of these participants declared that she did so sometimes for the sake of relationships with non-vegans. It is possible that the categories “vegetarian” or “reducing meat” would be more precise for these participants (it is not clear which kind of non-vegan food they referred to). The mechanism of *identity bolstering* for coping with dissonance described by Bastian and Loughnan (2017) may be an explanation for this finding. Participants may have adopted the vegan identity because of its symbolic benefits, e.g., its association with compassion towards animals, whilst not completely changing their consumption habits.

¹⁹ Bastian & Loughnan (2017). The data from the survey reported here do not allow certainty about the occurrence of dissonance amongst the participants. Meat-eaters are not likely to continually experience food-related cognitive dissonance in daily life because of widespread passive dissonance-avoidance mechanisms (Bastian & Loughnan, 2017) such as the ritualization and institutionalisation of meat consumption. However, it is possible to consider that dissonance probably occurred. The mere mention of veganism implies the possibility of personal choice regarding behaviours that involve harming animals (Vandermoere et al. 2019) and most people think that harming animals is wrong (Joy, 2010). This provides a basis for what has been called vegaphobia (Cole & Morgan, 2011; Vandermoere et al., 2019).

²⁰ Joy (2010).

²¹ Conditions for the occurrence of cognitive dissonance according to Cooper (2007).

²² Bastian & Loughnan (2017).

²³ Prochaska & Di Clemente (1982).

²⁴ These reasons are explored for example in Linzey & Linzey (2019).

²⁵ It is interesting to highlight that this expression, “carniveganism”, seems to be a perfect oxymoron.

²⁶ Moscovici (2000) shows that individuals and groups must construct social representations to understand reality and to steer their practices. Social representations are articulated sets of beliefs, images and emotions. They provide a theory of common sense for the attribution of causality. Individuals and groups construct social representations through the processes of objectification and anchoring. Objectification is responsible for attributing a “concrete” image to an “abstract” concept whereas anchoring accommodates new objects into extant familiar categories. In the present case, participants who were not considering veganism may have anchored veganism (the “new object” urging for an explanation) into the categories of “fad” and “a threat to the environment”.

²⁷ The participants who expressed negative attitudes towards veganism mainly belonged to the group of firm non-vegans. The discussion of the beliefs and attitudes of the other two groups will be expanded in future studies.

²⁸ Joffe (1995).

²⁹ See, for example, FAO (2006) and the popular documentary “Cowspiracy” (cited by Hancox, 2018). “The genre’s [polemical online documentaries] influential break-out hit was the 2014 documentary *Cowspiracy*, which looks at the environmental impact of animal agriculture, its contribution to greenhouse gas emissions, deforestation and excessive water use” (Hancox, 2018).

³⁰ Festinger (1957), Cooper (2007).

³¹ Anchoring is one of the sociopsychological processes for constructing social representations (Moscovici, 2000).

³² Cole & Morgan (2011); Vandermoere et al. (2019).

³³ Cole & Morgan (2011).

³⁴ Cole & Morgan (2011).

³⁵ Vandermoere et al. (2019).

³⁶ Joy (2010), Piazza et al. (2015).

³⁷ Festinger (1957), Cooper (2007).

³⁸ Adams (1994/2018), Singer (1990), Regan (1983/2004). For a comprehensive assessment of animal experimentation, the biomedical use of animals and the development of drugs see Herrmann & Jayne (2019).

³⁹ Thelander (2019), p. 218.

⁴⁰ Compassion in World Farming (2013).

⁴¹ Singer (1990).

⁴² Fisher (2019) shows that it is wrong to kill “happy animals”, even in the remote (if existent) possibility of inflicting a painless death, which would not cause suffering to others (humans or animals). The author states, “if animals count morally, we should not sacrifice their vital interests to promote the non-vital interests of ourselves” (p. 39). For the various nuances of his argument, see Fisher (2019).

⁴³ Regan (1983/2004).

⁴⁴ Adams (1990/2015, 1994/2018) shows that women, like animals, suffer the processes of objectification, fragmentation and consumption in the dominant patriarchal-carnivorous culture. Women from ethnicities represented as marginal are more vulnerable to these processes.

⁴⁵ Singer, (1990); Joy (2010).

⁴⁶ See, for example, “Free range is a con. There’s no such thing as an ethical egg” (*The Guardian*) and “Whole foods ‘free-range’ chicken supplier said to actually run factory farm” (*The Intercept*).

⁴⁷ British Dietetic Association & The Vegan Society (2017); Academy of Nutrition and Dietetics (2016). “It is the position of the Academy of Nutrition and Dietetics that appropriately planned vegetarian, including vegan, diets are healthful, nutritionally adequate, and may provide health benefits for the prevention and treatment of certain diseases. These diets are appropriate for all stages of the life cycle, including pregnancy, lactation, infancy, childhood, adolescence, older adulthood, and for athletes. Plant-based diets are more environmentally sustainable than diets rich in animal products because they use fewer natural resources and are associated with much less environmental damage” (Academy of Nutrition and Dietetics, 2016, p. 1970).

⁴⁸ Walsh (2019).

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- ⁴⁹ Walsh (2019), McDougall (2007).
- ⁵⁰ Godfray et. al (2018).
- ⁵¹ Godfray et. al (2018).
- ⁵² FAO (2006).
- ⁵³ Margulis (2003), Thornes (2019).
- ⁵⁴ Poore & Nemecek (2018).
- ⁵⁵ FAO (2006), p. XXI.
- ⁵⁶ FAO (2006), p. 43.
- ⁵⁷ FAO (2006).
- ⁵⁸ Thornes (2019), p. 247.
- ⁵⁹ Thornes (2019), p. 248.
- ⁶⁰ FAO (2006).
- ⁶¹ IPCC (2019).
- ⁶² FAO (2006).
- ⁶³ Godfray et. al (2018).
- ⁶⁴ Harper, Denmead, Freney & Byers (1999).
- ⁶⁵ Thornes (2019).
- ⁶⁶ FCRN (2017).
- ⁶⁷ Poore & Nemecek (2018).
- ⁶⁸ Poore & Nemecek (2018), p. 991.



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