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Experiences of initiating and maintaining a vegan diet among young adults: A qualitative study

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ABSTRACT

A vegan diet, which excludes all animal-derived products, has been associated with some improvements in health, while also conferring environmental benefits. Understanding the psychological determinants of successfully switching to a vegan diet will help to inform the design of interventions supporting long-term dietary change. Studies to date have tended to focus on reasoned motives underlying the decision to initiate such a dietary shift. Yet, focusing on reasons for switching may overlook the importance of a broader range of psychological factors that may help or hinder attempts to maintain a vegan diet. This qualitative interview study, the timing of which coincided with UK Covid-19 lockdowns, documented experiences of 20 young adults (17 female; mean age 22y) who attempted to adopt a vegan diet in the past nine months and had or had not successfully maintained this change. Reflexive Thematic Analysis identified five themes surrounding initiation and maintenance. A theme of 'motives, expectations and cues to switching' showed that switching was motivated by ethical or health concerns, and cued by Veganuary, lockdown or health issues. 'The effortfulness of switching' captured experiences of the perceived burden imposed by adhering to the diet due to, for example, a perceived lack of accessible vegan options. The 'flexibility of dietary rules' theme showed that many found the 'no animal products' rule clear but restrictive, so allowed themselves occasional non-meat animal products. 'Social acceptability concerns' captured the importance of acceptance from vegan and non-vegan family and friends, and 'satisfaction with the switch' described the perceived benefits that sustained maintenance for many. Our findings suggest that interventions should seek to support people to overcome potentially unforeseen practical and social challenges to adhering to a vegan diet.

1. Introduction

The vegan diet has been linked with health and environmental benefits. Eating minimal animal products is thought to be optimal for preventing and managing chronic disease and prolonging life (Clarys et al., 2014; Fehér et al., 2020). For example, while concerns have been raised about deficiencies in some nutrients (Richter et al., 2016), a vegan diet has variously been shown to improve cardiometabolic risk factors and reduce body weight, prevent and treat Type 2 diabetes, and lower cancer risk and increase the chance of remission and survival following a cancer diagnosis (Barnard et al., 2022; Guinter et al., 2018; Pollakova et al., 2021; Tantamango-Bartley et al., 2013). The vegan diet has been deemed the most ethical diet (Fehér et al., 2020), due to benefits to animal welfare, and reduced environmental impact (Candy et al., 2019). Perhaps consequently, consumers are increasingly switching to a vegan diet. Sign-ups to the annual international 'Veganuary' campaign, which encourages at least a temporary switch, increased from 3300 in 2013 to over 629,000 in 2022 (The Vegan Society, n.d.; Veganuary, 2022). However, many people fail to maintain the vegan diet; one US survey suggested 84% abandon their vegetarian or vegan diets, with a third giving up within three months (Faunalytics, 2016; but see Lockwood, 2019). Interventions are needed to support the long-term dietary shifts necessary to realise the benefits of a vegan diet.

Developing interventions to encourage lasting adoption of a vegan diet depends on understanding the psychological factors that determine why and for how long people attempt to switch to a vegan diet. Most

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research in this area has focused on reasons for switching; for example, many studies show that people typically choose to go vegan for health, environmental or ethical reasons (Ghaffari et al., 2021; Janssen et al., 2016; North et al., 2021; but see Cherry, 2015). However, an emphasis on motives for switching is problematic for two reasons. First, dietary change is a dynamic, long-term process, which continues to unfold after a decision is made to switch (Bryant et al., 2022; Grassian, 2020; Mendes, 2013). At a minimum, this process can be separated into psychologically discrete stages of *initiation* and *maintenance*. Initiation of a new behaviour arises from expectancies regarding the perceived outcomes of action, whereas maintenance is informed by whether experienced outcomes are sufficiently positive (Rothman, 2000). An individual who switches to a vegan diet may lapse into their prior diet if they fail to attain the positive outcomes that they anticipated, or if they experience negative outcomes that they did not anticipate. The decision-making process of a person considering switching to a vegan diet thus differs from that of a person reflecting on whether the switch was worthwhile. Second, focusing on expected or experienced outcomes of adoption or maintenance risks neglecting other psychological determinants of long-term dietary change. Behavioural models dictate that initiation is determined not only by outcome expectancies, but also by perceived social approval, and perceptions of confidence in one's ability to successfully adopt a dietary change (Ajzen, 1991). Indeed, one study suggested that the perceived difficulty of giving up meat was a major barrier to going vegan (Fehér et al., 2020). Theories of behaviour maintenance emphasise the importance of factors such as successful ongoing dietary self-regulation, supportive physical and social environments for sustaining a dietary change, and identity congruence (Kwasnicka et al., 2016). For example, even people who are motivated to maintain a new diet often must exercise effortful momentary self-control to overcome temptations to lapse into old dietary patterns in everyday settings (Gardner et al., 2021). Some people may be discouraged from adopting a vegan diet because they anticipate stigma and ostracism by significant others (Markowski & Roxburgh, 2019). Understanding successful - and unsuccessful - attempts to go vegan depends on documenting the many factors that may aid or inhibit adherence to a vegan diet.

This study used qualitative methods to explore the lived experiences of young adults who had attempted to switch to a strict vegan diet. Our aim was to derive an understanding, derived from participants' lived experience, of factors that drive people to initiate a switch to a vegan diet, or that aid or obstruct maintenance of this dietary change over time. We used semi-structured interviewing methods because these allow participants to reflect freely on their experiences, so can reveal the complex psychological structures that underpin real-world behavioural choices (Willig, 2021).

2. Method

2.1. Participants and procedure

Participants were recruited via an advertisement posted on social media (LinkedIn, Instagram) and an email circulated to undergraduates at the host institution. Both contained a URL to an online survey which screened potential participants against inclusion criteria: residing in the UK, ≥18 years, had made a serious attempt to switch to a strict vegan diet in the past nine months, and lived with at least one person who did not follow a vegan diet during that time. The latter criterion was included to capture reflections on dietary change in the presence of others who may or may not have been supportive. The study was undertaken as graduate coursework with no external funding, which imposed time and financial constraints. One such constraint was that recruitment had to be conducted in May 2021, such that participants' attempts to go vegan coincided with the Covid-19 pandemic.

Those who met our criteria provided informed consent online and next completed a questionnaire assessing demographics (age, gender, ethnicity, education, occupation), and their pre-switch and current diet ('omnivore: I ate/eat meat, fish, dairy and eggs'; 'pescatarian: I ate/eat fish, dairy and eggs but not meat'; 'vegetarian: I ate/eat dairy and eggs but not meat or fish'; 'flexitarian: I was/am primarily vegetarian but occasionally ate/eat meat or fish'; 'other' [which necessitated a free-text response]). Finally, participants provided their email address, to allow us to arrange the interview.

Of 30 people who consented, 20 (67%) were interviewed. Interviews were conducted online via a Microsoft Teams video call, which was video- and audio-recorded. After the interview, each participant was emailed a £10 shopping voucher. All procedures were approved by the King's College London College Research Ethics Committee (ref MRSU-20/21–23071).

While we had no formal a priori sample size target for saturation purposes, financial constraints limited us to no more than 30 participants. The final obtained sample size (N = 20) is likely to have achieved levels of theoretical saturation necessary to detect common themes among the target population (Galvin, 2015).

Our 20 participants ranged in age from 19 to 27 years (mean 22y) and were most commonly female (17; 85%), White (16; 80%), and students (17; 85%; see Table 1). Eleven (55%) participants had a degree or higher, and nine (45%) had A-Levels or equivalent (i.e., post-16 qualifications).

Before initiating a vegan diet, most participants reported having had an omnivorous (7, 35%) or vegetarian diet (7, 35%). The most common current diets reported were vegan (25%), or 'other' (25%), which uniformly described what we term a 'vegan-based' diet, characterised by occasional consumption of non-meat animal products (e.g., dairy, fish). Comparison of participants' categorisations of their previous and current diets demonstrated that five (25%) had maintained a strict vegan diet, and eight (40%) had not maintained any dietary change, such that they chose the same category for previous and current diet. Seven (35%) had changed their diet but did not classify their new diet as 'vegan'; of these, five had switched to a 'vegan-based' diet (e.g., 'I am vegan but I eat eggs and fish'), one had switched from omnivore to flexitarian, and one from omnivore to vegetarian.

2.2. Interview schedule

Interviews lasted 30–60mins, and were conducted by one of two

Table 1
Participant characteristics.

		N	%
Age	Mean 22y, range 19–27y	–	–
Gender	Female	17	85%
	Male	3	15%
Ethnicity	White	16	80%
	Asian/Asian British	2	10%
	Mixed	2	10%
Occupation	Student	17	85%
	Full-time employed	3	15%
Education	Degree or higher	11	55%
	A Levels or equivalent	9	45%
Previous diet	Omnivore	7	35%
	Vegetarian	7	35%
	Flexitarian	2	10%
	Pescatarian	2	10%
	Other ('fish, no dairy or eggs')	1	5%
	Other ('no dairy')	1	5%
Current diet	Vegan	5	25%
	Vegetarian	4	20%
	Flexitarian	2	10%
	Omnivore	2	10%
	Pescatarian	2	10%
	Other ('vegan-based')	5	25%
Change from previous diet	Maintained strict vegan diet	5	25%
	Maintained dietary change, but not strict vegan diet	7	35%
	Did not maintain dietary change	8	40%

female health psychology Masters students (EW, 9 interviews; KV, 11 interviews). Interviewers were trained, and supervised via weekly meetings, by a senior author with extensive qualitative research expertise (BG). None of the participants were known to the interviewers prior to study commencement. Interviews were semi-structured, and covered topics relating to: motives, preparation and expectations for switching (e.g., whether participants pursued strict or flexible vegan dietary rules); pre- and post-switch experiences of food selection, preparation and consumption (e.g., facilitators of initial switching); environmental and social contexts (e.g., experiences of adopting a vegan diet when cohabiting with a non-vegan); diet and health (e.g., perceptions of the healthfulness of a vegan diet); and perceived challenges, opportunities, costs and benefits of switching to a vegan diet (e.g., experienced personal disadvantages). Participants were likely in lockdown during their dietary switch, so we included a question about experiences of eating out and eating with others after lockdown restrictions ended. We anticipated that our other questions would be sufficient to elicit all other pertinent information on switching during lockdown.

The interview schedule, which is available as Supplementary Material, was developed by all authors. A first draft, generated by EW, KV and BG, was piloted by EW and KV, who each conducted an interview with a friend who they knew to have adopted a vegan diet. A subsequent second draft, refined by EW and KV to reword or remove questions that appeared to yield little relevant information and add new, pertinent questions, was reviewed and approved by BG and PL.

2.3. Analysis

Interview recordings were transcribed verbatim using automated software (Otter.ai; Corrente & Bourgeault, 2022). Transcripts were manually edited as necessary for accuracy, and analysed using predominantly inductive Thematic Analysis procedures (Braun & Clarke, 2019), underpinned by critical realist assumptions. Analysis involved six conceptually discrete stages: data familiarisation, systematic coding, generation of preliminary themes, developing themes, refining and naming themes, and writing the analysis (Braun & Clarke, 2021).

In practice, our analysis method blended elements of 'codebook' Thematic Analysis, in that it involved inductively identifying potential codes and themes early on to aid later coding processes, and 'reflexive' Thematic Analysis, such that analysis remained grounded in the data, and early coding structures were refined in response to insights that developed from the data through later coding (Braun & Clarke, 2021). Our 'codebook' methods involved three authors (EW, KV, BG) independently reading, rereading and coding a single transcript. Coding involved assigning labels that conceptually interpreted pertinent events within the data (i.e., codes) and writing narrative notes to try to identify the potential underlying meanings of the code, and each instance of the assigned code, in relation to our study aims. A meeting was held between the three authors to agree preliminary codes and nascent, multi-dimensional clusters of codes with shared meanings (i.e., themes). This set of codes and themes was applied, and iteratively refined, by EW as a framework for coding all remaining transcripts. 'Codebook' methods were adopted to allow BG, an experienced qualitative researcher and the project supervisor, to use the preliminary coding activities as a Thematic Analysis training opportunity for EW and KV, and to generate a coding guidance tool for EW while also ensuring initial insights were considered throughout subsequent coding.

EW iteratively refined codes and themes until an optimally coherent thematic structure was identified, with clear names and definitions for each theme, and a credible narrative interpretation of the data was achieved. Ongoing analysis was discussed in weekly meetings with BG and KV, to ensure credibility of interpretation and organisation of data. Themes were labelled using 'in vivo' codes (i.e., brief data extracts) to show their grounding in data. BG and PL verified that the final analysis offered credible interpretation of the data.

While we aimed to produce a predominantly inductive interpretation of the data, we recognise that our own personal perspectives inevitably influenced the analysis. For example, the senior authors' interests and background in social cognition, and especial interest in habitual behaviour, may have sensitised us to data on unwanted habits, and individual-level factors more broadly, that interfered with dietary maintenance. Similarly, EW and KV, as health psychology postgraduate students, may have been particularly attuned to health motives and experiences. We outline our backgrounds, personal experiences and motives for undertaking the research further in the next section.

In our narrative commentary, we accompany data excerpts with information regarding participants' previous and current diet, to contextualise their responses. Theme summaries are provided to aid comprehension.

2.4. Researcher positionality

The study was conceived by the senior authors (PL and BG, both behavioural scientists), to yield insight to support the change to a vegan diet. Given the senior authors' interest in habit and behaviour change, the study was originally developed to explore the role(s) of dietary habits in initiating and maintaining dietary change, but the focus of the project broadened through the study design process.

The study was undertaken by EW and KV, as postgraduate health psychology coursework, with direct supervision from BG, delivered via weekly meetings. Researcher EW is a vegetarian and has participated in Veganuary twice, including in 2021, when this study was undertaken. KV and BG follow an omnivorous diet but are interested in reducing their animal product consumption and view a vegan diet as a positive choice. PL has followed a diet free of dairy and meat products for three years. While BG and PL have previously published research on dietary choice and behaviour change, none of the authors had published research in the vegan domain.

3. Results

3.1. Themes

Five themes were identified: motives, expectations and cues to switching; the effortfulness of switching; the flexibility of dietary rules; social acceptability concerns; and satisfaction with the switch. The first theme pertained only to initiation of a vegan diet, and the latter four addressed post-initiation experiences.

3.1.1. *"I felt I'd be practising what I preached": motives, expectations and cues to switching*

Motives for switching fell into three categories: environmental, animal welfare and health reasons. Participants with environmental-related motives cited beliefs that animal products contribute significantly to climate change, and expected their individual actions to have meaningful environmental consequences:

> *"If I can reduce [my meat consumption] … that's one less cow that has produced methane and all the other greenhouse gases. And all the land intensive resources associated with it are gone."* (Participant 1, previously omnivore diet, currently vegan [P1, omnivore/vegan])

Those with animal welfare motives voiced opposition to perceived unethical farming practices (*"I don't see a reason why [animals] should suffer just for our enjoyment … the suffering is just not worth the outcome"*; P4, vegetarian/'vegan-based'). They expected dietary change to reduce dissonance from eating a diet they felt endorsed animal exploitation (*"I felt morally I'd be more in line with what I actually believed";* P20, vegetarian/'vegan-based').

Those with health motives attributed health detriments to animal products, and anticipated benefits such as increased energy and clearer skin:

"*I think dairy contributed to some problems I experienced on my skin, so I knew that cutting it out would help me*" (P15, omnivore/omnivore)

Some switched to enhance the nutritional value of their diet, so sought to become more dependent on fruit and vegetables, and less on processed, vegan alternatives to animal-based products:

"I wanted to include at least three to four vegetables in every meal that I had. I wanted my plate to be seventy percent vegetables. I also wanted to eliminate sugar and replace sugar with fruits." (P3, omnivore/'vegan-based')

Regardless of reasons for switching, participants' motivation was reinforced by exposure to information on the benefits of the vegan diet. Some recalled documentaries that made them question their dietary choices:

"*It [contained] really graphic footage of how animals are treated in factory farms, and every time I see that footage, it just makes me want to be completely vegan*" (P13, vegetarian/'vegan-based')

Others recounted observing, from vegan friends or vegan celebrities on social media, that a vegan diet could be appetising, offer satisfactory substitutes for animal products and improve health:

"[My friends] would cook me really good vegan food and … I honestly [couldn't] really taste the difference, so [thought] I might as well try it." (P6, omnivore/flexitarian)

Some were cued to switch by the 'Veganuary' campaign, which they viewed as a means of trialling the vegan diet, or by experiencing adverse physical symptoms that they attributed to animal products. Others were prompted by Covid-19 lockdowns, and sought to capitalise on the enhanced opportunities they felt they had to cook at home:

"I wanted to try it properly because of the lockdown. I was just like, I have time to cook now, there's no excuses. I can just give it a proper go and see if it works for me." (P6, omnivore/flexitarian)

3.1.1.1. Theme summary. Participants were motivated to adopt a vegan diet by ethical and health concerns, and the dietary switch was commonly prompted by the Veganuary campaign, physical problems that they attributed to animal products, or the Covid-19 lockdown.

3.1.2. "I'm so used to eating in my old ways": the effortfulness of switching

Several participants reported having reduced their animal product consumption, or adopted some vegan alternatives, prior to committing to a vegan diet ("*I've always eaten the vegan version of meat*"; P5, 'other'/vegan). They felt switching would be minimally effortful, so engaged in little preparation. Others had vegan friends who provided practical advice that simplified switching:

"*She'd [say] 'there's this place you can go to eat', or 'you need to try this vegan cheese' … it's quite helpful … [when] someone else has been there and done some of the hard work for you.*" (P4, vegetarian/'vegan-based')

Others reported considerable planning and preparation before switching, including, for example, trialling unfamiliar vegan alternatives or recipes.

"I did some research into how I could substitute certain foods - for example, good sources of protein. And then I researched places where I could buy substitutes such as tofu or soybeans or the Quorn replacements." (P10, vegetarian/vegetarian)

Many anticipated difficulties in moving away from animal products, so switched gradually (*"I knew that if I jumped into it, I wouldn't be able to stick to it";* P18, omnivore/vegetarian).

Despite some anticipating that adopting a vegan diet would be easy, all participants found maintaining their new diet effortful in some way. While those who used planning strategies found them beneficial for overcoming anticipated barriers, they nonetheless reported additional obstructions, such as reduced accessibility of vegan food:

"[I] plan meals a week in advance and then write a shopping list and then [stick only to] that. … [I] just like going straight to what [I] need and getting that and not picking things up by impulse. [But] if I'm getting something like tofu, I can't just go to [my usual supermarket], I have to go to [another] supermarket as well to get that because it's not available in [my usual supermarket]." (P17, other/other)

Participants found it especially difficult to adjust to the absence of foods for which no suitable vegan alternative could be identified:

"I can't have a dippy egg and some toast. That's not something that I'm ever going to be able to have. […] I miss some foods … that I have no substitute for." (P4, vegetarian/'vegan-based')

Several participants described struggling against old non-vegan habits, which retained the potential to prompt unintentional momentary slips:

"If I wasn't thinking and just was having some toast, it's very easy to go into the fridge, pull out a block of butter and not really clock it and afterwards be like, 'I completely forgot!' I remember doing that a few times." (P14, vegetarian/vegan)

One participant stated that their old habits undermined their vegan diet attempt ("*I was so used to eating in my old ways that it was just too much of a struggle";* P11, pescatarian/pescatarian). Others, however, used strategies to control exposure to unwanted temptations, including moving their food into vegan-only areas of the communal kitchen, asking housemates not to buy tempting foods, and avoiding non-vegan areas when shopping.

"I tried to go [only] to sections [of the supermarket] that had the items that I needed, because the moment you start walking past sections you shouldn't be in, that's when you want to eat foods that don't align with your diet." (P11, pescatarian/pescatarian)

Participants described having to be more mindful when selecting and preparing meals, to ensure a nutritionally balanced diet (*"You have to be more considerate about it, and make sure that you're getting adequate nutrition"*; P20, vegetarian/'vegan-based').

Availability of vegan options was considered key to maintenance. Eating away from home required especial planning to ensure options were available ("*I look at the menu before going just to make sure there is something I could have";* P2, omnivore/vegan).

3.1.2.1. Theme summary. Some participants made little preparation, whereas others carefully planned how to negotiate the switch. Maintaining the vegan diet was deemed effortful in some way by all participants because, for example, vegan alternatives to favoured foods were not always available, or unwanted old habits threatened to derail the new diet. Many participants used self-regulatory strategies to mitigate such barriers.

3.1.3. "All or nothing": the flexibility of dietary rules

Some participants found the rule of not consuming any animal-based product useful for shielding against unwanted lapses. They felt that violating this rule would either prompt them to abandon their new diet entirely or, by continuing to seek further exceptions, gradually erode their veganism.

"*If I ate something that wasn't vegan … that's the moment [I would] fall off the bandwagon, so it was all or nothing thing for me.*" (P11, pescatarian/pescatarian)

Some felt the clarity of this rule was conducive to developing vegan habits, which aided longer-term adherence:

"I decided when I started, I wouldn't touch anything that wasn't vegan, to counteract that part of me that would want stuff that's non-vegan. And now, that's just become a habit." (P7, flexitarian/vegan)

Others viewed strict abstinence from animal products as unrealistic and unsustainable, and felt dietary flexibility was key to maintenance:

"*I think it's really bad that people think if you want to go vegan, you have to give up everything. I know a lot of people say 'I'd be vegan if it wasn't for cheese'. I just think 'well, be vegan, but not cheese'."* (P14, vegetarian/vegan)

Participants described making conscious exemptions to their vegan diet in settings in which food consumption was particularly meaningful, such as on special occasions, such as birthdays, or when others had prepared a meal:

"*It's not really worth complaining or ruining a friendship over; if somebody cooks you dinner, it's really kind of them."* (P7, flexitarian/vegan)

Some participants reluctantly made exceptions when they anticipated awkwardness among non-vegans ("*at one gathering … people ordered pizza … I didn't feel comfortable asking them to order a pizza that was vegan specifically for me*"; P15, omnivore/omnivore).

While all participants reported having relaxed the rules of their vegan diet on at least one occasion, they nonetheless observed rigid rules regarding exceptions. Meat products were strictly prohibited, but occasional non-meat products from apparently well-treated animals were however acceptable:

"*The type of things that I break [my vegan diet rule] for are things that aren't vegan but are vegetarian.*" (P13, vegetarian/'vegan-based')

"My partner's friend has chickens [that] are so sweet and cute and looked after and loved. And he brought down a couple of eggs for me to have, and that's the only time I've had eggs." (P4, vegetarian/'vegan-based')

Some participants reported making exceptions when an animal product would otherwise go to waste, or when eating non-vegan was expected to reduce overall harm to animals:

"My partner's dad accidentally picked up vegetarian [chicken pieces] for a curry. And [I thought] if anything it's probably less harmful that I have the vegetarian and [others] have the vegetarian ones [too], than they have meat and I have the vegan ones." (P4, vegetarian/'vegan-based')

3.1.3.1. Theme summary. The unequivocal nature of the rule of not consuming any animal-derived products was deemed helpful for demarcating rule-congruent dietary decisions. However, some worried that violating it would lead them to wholly disengage from their dietary switch. Many participants adopted more flexible dietary rules that permitted occasional non-meat animal products.

3.1.4. "My dad finds it really annoying": social acceptability concerns

Social approval and disapproval were seen as important for maintenance. Several participants felt that eating a different meal to non-vegans could lead to feelings of exclusion, and so obstruct the social bonding function of communal eating:

"Having food together … brings your family together. [But] me just cooking on the side, always being late to the table … I felt a bit of a disconnect." (P6, omnivore/flexitarian)

Several participants felt that their non-vegan family or friends disapproved of their new diet. Most felt their family members understood their motives but disagreed that a vegan diet was superior for health or the environment:

"*[My mother doesn't] see the point of going vegan because [she thinks] by being vegetarian we're already helping a lot in terms of the environment.*" (P10, vegetarian/vegetarian)

Others believed their parents were reluctant to invest effort to accommodate their new diet, and some felt they were actively obstructing it:

"*My dad finds it really annoying that he has to make me vegan food … it's hard when other people don't want to cater to you*" (P5, other/vegan)

"*[My mum would say] 'I couldn't find the vegan alternative in the store'. You know it's there, but [she] didn't buy it"* (P9, flexitarian/flexitarian)

Other participants described emotionally and practically supportive family or friends, who purchased vegan options, or made vegan-friendly dishes, which promoted inclusiveness (*"my parents were really good at helping cook for me. They even started doing a communal vegan night";* P1, omnivore/vegan).

Many participants reported anxiety when eating around hosts unaware of their vegan diet, and worried about being seen to burden others with their dietary requirements ("*if you're saying, 'oh, I'm vegan', then someone has to cook a specific thing [for you]*"; P20, vegetarian/'vegan-based'). Others worried about appearing impolite or sanctimonious, or confirming perceived stereotypes:

"*I don't want to be one of those … vegans who say 'there's nothing here for me to eat'*."(P2, omnivore/vegan)

Socialising with other vegans provided a sense of belonging, affiliation, and support, so alleviating feelings of segregation:

"*[If] you're not the only one that's on a vegan diet, you've got someone else, you don't feel isolated and marginalised at a dinner party*"; P9, flexitarian/flexitarian)

Some felt that socialising with other vegans made them more accountable for deviating from their vegan diet ("*I don't want to meet them and then have to tell them that I'm not always fully vegan";* P13, vegetarian/'vegan-based').

3.1.4.1. Theme summary. Some participants felt that their family members disapproved of their vegan diet, whereas others reported emotional and practical support and approval from friends and family. While many felt awkward about being seen to be imposing their vegan dietary requirements on non-vegans, they experienced belonging and a sense of support among other vegans.

3.1.5. "I was not feeling very nourished": satisfaction with the switch

Participants reported several benefits of their new diet, which motivated maintenance. Some reported boosts in self-esteem from having reconciled their behaviour with their beliefs and values ("*I mostly just feel better about myself because I think I'm doing the right thing*"; P13, vegetarian/'vegan-based'). Others recounted health-related benefits, such as better digestion, and clearer skin (*"I never wear makeup because my skin is so good"*; P5, other/vegan).

Some found the restrictiveness of a vegan diet to have indirect benefits. They felt it encouraged them to become more dietarily adventurous, exploring new products, recipes and preparation methods, which increased their enjoyment of food:

"*It forced me to get really creative … I remember having to learn new ways of cooking, exciting ways of cooking, trying new foods that I never tried before.*" (P6, omnivore/flexitarian)

Others found the reduced availability of unhealthy foods aided the healthfulness of their diet:

"*There's [much fewer] bad foods [available]. […] It forces you into a healthier or smaller choice, which helps because it means you don't get as many takeaways."* (P1, omnivore/vegan)

Participants who failed to maintain dietary change often found the vegan diet overly prohibitive, or were discouraged by unexpectedly high costs:

"*I felt like I was missing out [on] a lot [of foods].*" (P11, pescatarian/pescatarian)

"*Vegan substitutes are incredibly expensive … vegan food is often priced at a premium.*" (P6, omnivore/flexitarian)

Concerns around nutritional adequacy appeared important in determining satisfaction and maintenance. One participant disengaged due to fatigue that they attributed to nutritional deficiencies (*"[I gave up because of] tiredness to be honest, [I] was just not feeling very nourished*"; P16, vegetarian/vegetarian). Several participants who failed to maintain the diet cited the belief that some animal products are required for nutritional balance, and so felt that the vegan diet is unnatural:

"*I don't think it's healthy to be one hundred percent vegan, I still think you need some form of [animal-derived] protein*" (P3, omnivore/'vegan-based')

"*Our bodies have adapted … to process meat and dairy*" (P19, omnivore/omnivore)

Those who maintained a strict vegan diet, however, recounted similar concerns around nutritional inadequacy but reported physiologically adjusting:

"At the beginning, I was probably a bit lethargic from the change and I got quite dry lips […] but when my body got used to it, it was fine." (P14, vegetarian/vegan).

Some participants motivated themselves to persist, despite their dissatisfaction, by recounting their reasons for switching ("*every time you're tempted to stop, just remind yourself why you're doing it*"; P5, other/vegan). Others, however, found it difficult to recreate the initial impact of their motives:

"*As time goes on, you don't forget the documentaries [about the animal product industry], but it's not fresh in your head, so it's easier to excuse eating something that's not completely vegan.*" (P13, vegetarian/'vegan-based')

3.1.5.1. Theme summary. For many participants, switching to a vegan diet had positive impacts that encouraged them to continue, including improvements to health, self-esteem, and their dietary repertoire. Others disengaged because they experienced the vegan diet as too restrictive, costly, or nutritionally inadequate.

4. Discussion

Despite potential health and environmental benefits, many people abandon attempts to switch to a vegan diet. Our study focused on the reflections of young adults who attempted to switch, with varying success. Findings suggested maintenance was undermined by concerns around the healthfulness and restrictiveness of the diet, the effort required to maintain it, and a lack of social support. Conversely, those who found the diet beneficial, adopted self-regulatory strategies to tackle practical barriers to adherence, and experienced emotional and practical support from non-vegan family and friends were reportedly more likely to maintain it. While young adults may not represent all age groups, our findings suggest interventions promoting sustainable diets should focus on managing early post-switch experiences, supporting people to overcome unwanted impulses, and promoting social acceptance.

Whereas past research has tended to emphasise the importance of motives for switching to a vegan diet, our study was unique in its focus on post-switch experiences. Some participants disengaged because they felt the vegan diet lacked nutritional adequacy and reported adverse health effects. Concerns around the healthfulness of a strict vegan diet have been raised by dietitians (Richter et al., 2016), though readily available vitamin supplements can mitigate nutritional deficiencies (Weikert et al., 2020). Other participants experienced physiological adjustment to their new diet, such that initial adverse impacts of nutrient intake changes dissipated. If health and nutrition disruptions following a shift to a vegan diet are indeed only temporary, interventions could focus on supporting people to manage adverse immediate post-switch experiences.

Concerns were also raised around the restrictive nature of the vegan diet. Some participants found it difficult to psychologically adjust to an absence of animal products, especially for foods for which they felt no adequate vegan substitute was available. Participants responded to this dilemma in one of two ways. Some abandoned dietary change entirely, because they viewed violating this rule as a fundamental breach of vegan principles, whereas others adopted a more flexible vegan-based diet with occasional non-meat animal products. These findings speak to the importance of dietary maintenance rules. Abstinence rules impose strict parameters regarding acceptable and unacceptable behaviour, so can prevent dietary lapses (Grassian, 2020). Breaking such rules, however, often prompts disengagement, as people experience losses in self-efficacy from failing to remain abstinent, in turn leading to abandonment of change (Shiffman et al., 1997). Interestingly, participants who settled on a 'vegan-based' diet adhered to implicit rules of acceptable animal products. These findings echo research showing that, among people pursuing vegetarian or vegan diets, a hierarchy of abstention rules exists whereby, when people abandon strict rules, they are least likely to eat meat and most likely to eat eggs and dairy (Grassian, 2020). Intervention developers might better target those for whom animal products are more integral, by legitimising a more flexible, 'mostly vegan' diet.

Many participants found it effortful to maintain a vegan diet. In part, this was due to reduced accessibility of vegan food, which will likely become less of a barrier as vegan options become more widely available (Garnett et al., 2019). Importantly however, participants reported difficulty in inhibiting impulses to engage in old dietary behaviours. This may reflect the habitual nature of such behaviours. Habitual behaviours arise from situation-action associations, developed through repetition, which automatically generate action impulses in associated situations, potentially without awareness (Gardner, 2015). People can adopt new diets yet retain old dietary habit associations (Gardner et al., 2021). In such instances, habit impulses may unknowingly prompt 'action slips' into unwanted behaviours, particularly when people are distracted (Gardner, Lally, & Rebar, 2020). Alternatively, difficulties in resisting unwanted impulses may have arisen from conflicting goals. That is, animal-derived products may be at least momentarily tempting because they are seen to taste better than vegan alternatives, so meet hedonic goals that conflict with the concurrent goal of maintaining a vegan diet (Buabang et al., 2022; North et al., 2021). In practice, these differing perspectives can be reconciled by situated intervention techniques that address both unwanted habits and goal priorities. Breaking unwanted habit associations is best facilitated by overwriting them with alternative responses, such that a new, pro-vegan response (e.g., using vegan butter) to a situation (e.g., making toast) is consistently performed in direct displacement of an old, unwanted response (e.g., using non-vegan butter; Gardner et al., 2021). One way to achieve such 'habit substitution' is to raise attention of non-habit alternatives at critical moments, to enhance the likelihood of mobilising the willpower necessary to inhibit unwanted responses (Gardner, Rebar, & Lally, 2020). For example, placing attention-grabbing posters advertising the benefits of a vegan diet may remind people of their vegan dietary goals, thereby encouraging mindful displacement of old dietary purchasing habits with pro-vegan purchases. This same technique, which has been shown to shield people from temptations (Papies & Veling, 2013), is viewed as 'goal priming' by goal theorists, who would argue that it encourages the prioritisation of valued vegan goals over any conflicting goals that encourage non-vegan consumption (Papies, 2016). Alternatively, adopting self-regulatory techniques such as 'if-then' planning, whereby people mentally rehearse new responses to settings associated with old,

unwanted behaviours, can prioritise performance of those new behaviours, potentially despite the presence of unwanted habits (Adriaanse et al., 2011).

Social approval appeared important for maintenance. Practical or emotional support from others encouraged participants to maintain their vegan diet, whereas a lack of acceptance from non-vegans hindered dietary change. Some participants reported feeling excluded when eating a vegan meal alongside people eating non-vegan food. Our participants also voiced concern about not wanting to impose their vegan principles or practices on others. Such considerations may arise from stigma surrounding the vegan diet (MacInnis & Hodson, 2017), which appears to stem from violation of dietary norms (Markowski & Roxburgh, 2019). Some participants, however, reported that family members embraced their new diet. As the vegan diet becomes more prevalent (Veganuary, 2022), norms are likely to become more accepting. Nonetheless, interventions might focus on promoting acceptance among non-vegans, and suggesting techniques for negotiating a vegan diet among non-vegans.

Limitations must be acknowledged. We portrayed maintenance as continued adherence to a strict vegan diet (see Lockwood, 2019). However, a quarter of our sample failed to adhere to a strict vegan diet but nonetheless maintained a 'mostly vegan' diet. Dietary change may be most realistically portrayed as a gradual process involving reviewing and refining dietary goals until a feasible diet is found (Grassian, 2020). Dichotomising dietary change into 'initiation' and 'maintenance' may overly simplify this process. Additionally, participants' attempts to switch likely co-occurred with one of the UK Covid stay-home lockdowns of 2020–21, which may have affected experiences of switching. Covid lockdowns led many people to amend their diets; some studies found that some people made positive dietary changes during Covid lockdowns, whereas others increased their consumption of comfort foods (Bennett et al., 2021). For some people – including some of our participants – lockdown offered a significant opportunity and motive for enacting desired dietary changes for health or ethical purposes (Marty et al., 2021). For others however, the stress of lockdown conditions prompted them to use food for mood enhancement (Ingram et al., 2020; Marty et al., 2021). This is important, because dietary choices among non-vegans tend to be more driven by taste and enjoyment (North et al., 2021). While we did not ask participants about their broader dietary experiences during lockdown, negative affective experiences arising from lockdown may have undermined the switch to a vegan diet for emotional eaters. Lockdown may therefore have facilitated initiation and maintenance of a vegan diet for some people but obstructed it for others.

We assumed that all participants would be able to sufficiently recollect experiences of switching within the previous nine months and did not record the length of time since they initiated dietary change. It is however possible that participants who attempted to switch earlier within the preceding nine-month period may have had less accurate recall of their experiences than others. Lastly, our sample was of mostly female, highly educated, young adults. Although this echoes research showing that vegans are more likely to younger, female, with higher educational attainment (Paslakis et al., 2020), it is unclear to what extent the experiences we documented are shared by other demographic groups. For example, the role of parents in shaping dietary behaviour is unlikely to generalise to adults outside of this age group, who are more likely to live independently, and commentators have highlighted the conflict that males may face around going vegan given gender identity norms linking meat consumption to masculinity (Modlinska et al., 2020).

Our study revealed potentially important post-switch barriers to maintaining a vegan diet. Findings attest to the importance of distinguishing between factors underpinning initiation versus maintenance of a vegan diet and call for interventions to overcome practical and social challenges to adherence that may not be foreseen when initiating a vegan diet.

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CRediT statement

Conceptualization, BG and PL. Methodology, EW, AV, PL and BG. Formal analysis, EW, AV and BG. Investigation, EW, AV and BG. Data curation, EW, AV and BG. Writing - original draft: EW and BG. Writing - review and editing: BG, PL, EW and AV. Supervision: BG. Project administration: BG.

Ethical statement

All participants provided full informed consent. All procedures were approved by the King's College London College Research Ethics Committee (ref MRSU-20/21–23071).

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data are available at https://osf.io/nejbc/?view_only=79f9991378d04590bed7c8904c112c1c.

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