

NUTRITIONAL PRACTICES AND EXPERIENCES OF PEOPLE ON VEGAN DIET WITH HEALTHCARE SYSTEM: A QUALITATIVE STUDY

Varvara Borisova¹, Tereza Stöckelová¹, Anna Ouřadová², Jan Gojda²

¹Institute of Sociology of the Czech Academy of Sciences, Prague, Czech Republic

²Third Faculty of Medicine, Charles University, and Královské Vinohrady University Hospital, Prague, Czech Republic

SUMMARY

Objectives: The growing popularity of diets that restrict the consumption of animal-based foods is an important new challenge for the public healthcare system in Czechia. While the environmental and health-related benefits of plant-based diets are widely discussed in the media, people who follow these diets may lack professional support in terms of nutritional advice and even access to healthcare. The present study aims to map the nutritional practices and experiences with the healthcare system of people in Czechia who follow vegan diets.

Methods: In a qualitative study we conducted semi-structured interviews with twenty-one self-reported adult vegans (14 women and 7 men; 18 with university education) who were on a vegan diet for at least a year. We were specifically interested in their motivation for why and how they became vegans; their everyday diet and eating routines; their use of health care and experiences with medical professionals; their nutritional knowledge and use of supplementation; and their perception of their health and embodiment.

Results: The primary motivations for going vegan are ethical, environmental and health-related. Vegans see themselves and their diet as generally healthier, but for this to be true they must spend a considerable amount of time researching nutritional requirements and what dietary supplements they need. To this end, they tend to rely mainly on non-medical sources of information. Because of the lack of acceptance of veganism among primary-care physicians, vegans tend not to seek out medical advice or tell their doctor about their eating habits in order to avoid conflicts and negative experiences.

Conclusions: We identified a perceived lack of accessible educational materials and potentially limited access to primary healthcare recommendations for people who eliminate the consumption of animal-based foods. These findings deserve further research and public health risk-mitigation strategies.

Key words: vegan, access to healthcare, motivation, supplementation, lay attitudes to nutrition

Address for correspondence: T. Stöckelová, Institute of Sociology of the Czech Academy of Sciences, Jilská 1, 110 00 Prague 1, Czech Republic.
E-mail: tereza.stockelova@soc.cas.cz

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INTRODUCTION

Diets that reduce the intake of animal-based foods are gaining popularity globally and Czechia is following this trend. Veganism was originally associated with concerns for animal welfare and animal rights ethics. Arising out of the aspiration to minimise harm and cruelty to animals, it can be widely defined as a way of living that seeks to exclude all forms of animal exploitation (1). Currently, more people today are becoming interested in veganism for environmental concerns, since plant-based diets are considered more sustainable. Furthermore, people are also motivated by the growing evidence about the health benefits of a plant-based nutritional regimen.

Nutrition is one of the main environmental factors driving the current global pandemic in non-communicable diseases (NCD) affecting humans. An important strategy for combating this trend would be to reduce the consumption of animal-based foods in our diets (2, 3). A number of professional organisations and scientific bodies have included reducing the consumption of animal-based foods, especially red and ultra-processed meat, among their

recommendations (4, 5). Reducing the consumption of animal-based foods globally is one of the important aims set out in the World Cancer Research Fund's and the EAT-Lancet's initiative to combat both the global surge of NCDs and climate change (6). Climate change mitigation programmes often focus on reducing the carbon footprint and water usage in food production (7–9). Despite the clearly increasing popularity of plant-based diets, the quality of such diets can vary both in terms of people's intake of critical nutrients, novel food, processed meat alternatives, and dairy substitutes. Recent large-scale prospective studies have shown that people's plant-based dietary patterns vary in terms of quality and the quality of these diets can have a significant impact on health and disease outcomes (10–13). These findings highlight the need to distinguish between plant-based diets that are healthy (i.e., whole and raw foods) and unhealthy (i.e., ultra-processed foods, refined grains and beverages high in added sugar).

According to a 2020 survey, 10% of the Czech population prefers not to eat or at least to minimise consumption of meat products, while 28% of Czechs want to include more plant-based food in their diet and fewer animal products (14). Nevertheless,

this trend is largely unsupported by public health measures that could provide nutritional guidance and monitor and prevent potential nutritional deficiencies. There are now evidence-based recommendations and food-based dietary guidelines (FBDG) for vegans and people who are reducing their consumption of animal products, such as the VegPlate, the Giessen Vegan Food Pyramid, and the Vegan Eatwell Guide. A strong role should also be played, however, by the primary healthcare sector whose job is to share evidence-based information with the general population. They should serve as a source of credible dietary information for the public (15). The European Food and Nutrition Action Plan 2015–2020 (16) underscores the importance of reinforcing the work of healthcare systems in promoting healthy diets and highlights the need to set up nutrition assessments and intervention procedures in all healthcare settings.

However, in practice, people who modify their eating habits may have limited access to the information and assistance they need from primary health care. One of the biggest obstacles to accessing nutritional information is that primary healthcare practitioners generally lack training in nutrition and underestimate the efficacy of nutritional advice. Many healthcare facilities do not offer nutritional services at all, one reason being that they might have a problem obtaining reimbursement for such services from the health-insurance system (17, 18). Moreover, some healthcare professionals may be opposed to veganism – whether this is preventing people from actually accessing health care in Czechia has yet to be studied.

Vegans represent a model population for studying trends in the acceptance of diets that limit the intake of animal-based foods among the public and in the primary healthcare sector. This issue has never been explored in Czechia based on the practical experience of vegans. We therefore decided to conduct a qualitative study of vegans in Czechia to examine their subjective health perception, how much attention do they pay to their nutritional needs, their attitudes towards nutritional supplementation, and their experience with primary health care.

Literature Review

With the rising number of people adopting a vegan diet, there is a need for evidence-based guidance on the health effects of eating less meat, especially for people in particular age groups, i.e., children and adolescents, or in certain circumstances, such as women who are pregnant or breastfeeding.

Existing evidence suggests that plant-based diets, including a vegan diet, are accompanied by a greater risk of inadequate intake and deficiencies in certain nutrients, in particular vitamins B12 and D, omega-3 fatty acids EPA and DHA, iron, iodine, zinc, and calcium. These nutrients are mainly found or are more bioavailable in animal products. On the other hand, people who follow a healthy vegan diet have a significantly higher intake of several nutrients with beneficial health effects that are most abundant in plant foods, such fibre, PUFA, ALA, vitamins C, B1, B6, and E, folate, and magnesium (19, 20).

Following a healthy vegan diet may lead to weight loss and improved cardiometabolic intermediates (LDL-cholesterol, fasting glucose, HbA1c), which suggests it may prevent cardiometabolic diseases. There is weak evidence suggesting that a vegan diet may lower the risk of cancer, but there is no available evidence relating to specific cancer sites. One of the

most critically discussed safety concerns of a vegan diet remains bone health. Current evidence suggests that a vegan diet may be associated with accelerated bone turnover, lower bone mass, and a higher risk of fractures. This could be explained in particular by the reported lower calcium and vitamin D status of vegans. It should be stressed that these results are predominantly based on low or very low certainty of evidence (21). Further studies are therefore necessary in order to obtain detailed data on vegans' nutrient intake and supplementation to determine the effects of a vegan diet on health and health outcomes generally and in subpopulations such as pregnant women or children (20).

The social sciences have mostly examined veganism in relation to activism, identity, consumption, gender, and animal studies (22, 23). Considering the aims of our study, we have primarily worked with literature that considers veganism an embodied practice and examines vegans' experience with health care and medical practitioners.

British social geographer Catherine Oliver conceptualised veganism as a world-making practice and a 'more-than-human approach to caring geographies' (24). She argues that veganism can be seen as an embodied ethics and relationality and she explores how vegans navigate meat-centric societies, overcome existing frictions, and transform social and cultural spaces by 'stretching' their vegan narratives beyond their physical bodies. The author focuses on the transformative world-making potential of veganism and argues that it represents a way of life that is less tightly governed by gender and other social norms.

Estonian sociologist Kadri Aavik focuses on veganism in relation to animal studies, gender, biomedicine, and deviance. Her approach to veganism is similar to Oliver's as she considers it an embodied political practice that has the potential to disrupt the established social order based on human domination over animals. Her study of institutional resistance to veganism in Estonian medical encounters is of particular interest to the present paper (25). Based on her research with vegans in Estonia, Aavik argues that in the biomedical paradigm, a vegan's body is constructed as deviant and, therefore, malnourished or endangered. Such conclusions by medical professionals are, however, not based on actual health parameters but on stereotypes and assumptions about veganism, which is *a priori* pathologized. The vegans she studied claimed to have the impression that health workers want to 'fix' them and make their bodies socially (and politically) acceptable.

In a paper focused on the vegan stigma, American sociologists Kelly L. Markowski and Susan Roxburgh describe how anticipation of being socially stigmatised as a vegan can pose a barrier to adopting a plant-based diet (26). The authors' findings are another example of veganism being perceived in a negative way, which can result in non-vegans deploying different strategies of social and behavioural distancing from the vegan lifestyle. On the other side, vegans tend to self-silence and not express their vegan preferences in order to avoid being stigmatised (27).

In an article concerned with discursive constructions of food and health in VegChat, an online vegan forum, Australian sociologist Ellen Scott examined the relationships between veganism and healthy eating (28). She found that in the vegan community veganism is constructed as a healthy way of life that can be achieved by following simple rules, and vegan bodies were presented as superior, healthy and happy. Consequently, possible health problems are not associated with veganism

Table 1. Overview of the sample

Interview No.	Nickname	Gender	Age	Education	Duration of vegan practice (years)	Primary motivation for going vegan (or vegetarian)	Current vegan status
1	Lenka	F	29	University	10	Ethical	Yes
2	Tomas	M	26	University	1.5	Ethical	Yes
3	Ingrid	F	29	High school	3	Ethical	Yes
4	Jan	M	48	University	10	Ethical	Yes
4	Natalie	F	37	University	10	Health	Yes
5	Anna	F	30	University	3	Environmental	No
6	Martin	M	35	University	7	Ethical	Yes
7	Alice	F	27	University	3	Health	No
8	Katka	F	25	University	4	Health	No
9	Ema	F	30	University	3	Ethical	Yes
10	Vaclav	M	28	University	8	Health	Yes
11	Petr	M	24	University	2	Ethical	Yes
12	Tana	F	28	University	6	Ethical	Yes
13	Lucie	F	22	High school	8	Ethical	Yes
14	Viktorie	F	25	University	7	Environmental	Yes
15	Glorie	F	49	High school	10	Ethical	Yes
16	Marek	M	30	University	10	Environmental	Yes
15	Dina	F	30	University	11	Ethical	Yes
17	Edit	F	35	University	8	Ethical	Yes
18	Josef	M	25	University	9	Ethical	Yes
18	Zuzana	F	27	University	9	Ethical	Yes

itself but with a lack of knowledge and skills on the part of individual vegans.

MATERIALS AND METHODS

The article draws on qualitative data generated from July to November 2022 through semi-structured interviews with vegans. The interviews were conducted by VB and TS, either online or in person. The topic guide included questions on the interviewee's motivation for and transition to veganism, everyday diet and eating routines, use of health care and experience with medical professionals, knowledge on nutrition and the use of supplementation, and perceptions of their own health and embodiment. Interviewees were searched for and enrolled through Facebook and a call for participation was sent out to the mailing list of the Czech Climate Coalition network. No exclusion criteria were applied, and all interviewees who expressed interest in participating in the study were interviewed. In line with grounded theory, the sampling strategy aimed to achieve theoretical saturation (29). The interviews lasted from half an hour to over an hour. They are audio-recorded and transcribed for analysis. All interviews were carried out in the Czech language. Each interviewee was asked to grant informed consent with the interview and the use of data. Interviewees who expressed the wish to approve of the quotes used in publications approved their quotations in the present article.

A total of 18 interviews were conducted with 21 interviewees (three interviews were with couples in which both partners were

vegan). The majority of interviewees considered themselves vegans at the time of the research, while some of them went back to eating some animal products after a period of veganism. The primary motivations for becoming a vegan (or vegetarian at first) were ethical concerns about animal welfare (14), personal health (4), and the environmental impacts of animal food production (3). All but 2 of the interviewees had a university education. Out of the 21 participants, 20 lived in the Czech Republic at the time of the interview. Table 1 presents an overview of the sample.

Informed by the existing literature and in conformity with grounded theory, we applied an inductive approach to our data analysis (29). The research was carried out according to the Code of Ethics of the Czech Association for Social Anthropology and all the data are anonymised.

RESULTS

The following sections provide qualitative insights regarding four health-related issues in vegans' lives: their subjective health experience when they were following a plant-based (or mostly plant-based) diet; their views on and everyday attention to the nutritional value of their food; their attitudes towards and use of supplementation; and their experiences with the healthcare system and medical professionals. Given the qualitative nature of the data and the size of the sample (21 interviewees), which is not representative of the population of vegans in Czechia (whose demographic structure is unknown), the aim of the present analysis

is to map out – not quantify – the key issues and the gaps between current medical knowledge and available healthcare services and the everyday lives of vegans in Czechia.

Subjective Health Experience

Most interviewees recalled that after going vegan they experienced significant physical changes. Generally, they felt these changes to be improvements. As well as feeling ‘lighter’ or not having mood swings, interviewees most commonly reported changes such as getting rid of eczema and digestive problems, weight loss, and better immunity. Many of them believed themselves to be healthier than their omnivorous peers.

It really impacts your physical health. I don't know a vegan who would say they are sick (Jan, 49/10, ETH).*

A few interviewees mentioned that they were concerned at some point about the possible negative effects of veganism on their own or their children's health. While some of them managed to overcome their concerns and remained vegans, for others, these uncertainties triggered a chain of events that eventually led them to abandon veganism or to the decision not to raise their children as vegans.

I think (veganism) is much healthier than eating red meat every day, but it was not good for my health because I couldn't eat everything I should (have been eating), (and get) enough nutrients, and I was very skinny and weak (Katka, 25/4, HEA).

I thought about (raising our son as a vegan) a lot... It is complicated, and the studies did not convince me about whether or not it could harm a developing child. I was not sure about this (Martin, 35/7, ETH).

Among the majority of interviewees who remained vegans, the prevailing consensus was that a vegan diet benefited their mental and physical health and helped them better understand their body's needs.

At the same time, however, interviewees especially underscored the fact that veganism is not automatically a healthy diet and that it can be practised in an unhealthy way. Some of our interviewees indeed admitted that their eating habits could not be considered healthy. While Martin (35/7, ETH) explained that his eating habits were unhealthy because of his busy schedule and lack of time, Tomas (26/1.5, ETH) said that he did not go vegan out of health concerns but for his ethical beliefs. Regardless of their primary motivation, however, almost all the interviewees acknowledged the importance of the nutritional aspect of their dietary regimen. Interestingly, some of them were not just worried about themselves or vegan relatives but were concerned about how any health problems they might have could affect the public image of veganism.

I am afraid that I'll be lacking something, and I'll be that person who people will point at and say 'that's because you're vegan' (Viktorie, 25/7, ENV).

Given these concerns, the majority of interviewees reported that they had made a considerable effort at the beginning of their vegan journey to learn about nutrition and create a menu that would be nutritionally complete.

Paying Attention to Nutritional Value of Food

Interviewees repeatedly emphasised that veganism had introduced them to a brand-new world of both delicious and nutritious products. With this argument they dismissed criticism of vegan food, which is often stereotypically described as plain or bland. A similar finding was reported in a Melbourne study conducted among young vegan women who claimed that they often encountered misconceptions in the non-vegans around them, who tended to think that vegans eat nothing but ‘grass and salad’. These women explained that after switching to a plant-based diet they began eating a much wider range of foods (22). The interviewees in our sample did not think that vegan meals were in any way deficient; on the contrary, in their opinion, it is the omnivorous diet that is nutritionally poor and boring because it is all about meat and side dishes:

My grandmother cooked... I think it wasn't filet mignon, but it was just some kind of sauce with a side dish with meat, so there is no nutritional value. And she said to me, 'What are you going to eat if you're a vegan?' and I was like, 'Grandma, look at what you eat!' ... I sometimes wonder how meat eaters are still alive (Anna, 30/3, ENV).

When describing their dietary regimen, many interviewees often used the word ‘balanced’ to describe the meals they eat. They stressed that veganism is not about ‘eating fries and drinking coke’ (even though that is one way of being vegan) and that vegan food can – and should – be nutritious, tasty, and diverse. The interviewees' answers indicate that they are aware of the need to replace animal products with adequate plant-based alternatives in order to get the nutrients they need. But while the majority of interviewees were already acquainted with meat substitutes like tofu, tempeh, or seitan because they had previously been vegetarian, replacing products such as milk, cheese, and cream – and making up for the nutritional value these foods provide in an omnivorous diet – can be difficult in the beginning. Anna admitted that her first attempt to go vegan failed because she just stopped eating all animal products and did not think about alternatives, and as a result her meals were nutritionally insufficient.

I tried (being vegan) before when I was 18 or 19. I thought it was the right thing to do. I had little money and no information about how to get these nutrients. I wasn't thinking about what I ate. After a month, I got sick, and I felt that I was doing it wrong and should do it differently (Anna, 30/3, ENV).

By the time she made her second attempt, she was ‘prepared’ and did it the ‘right way’. The ‘right way’ often means that the transition to veganism also included dedicated research. All the interviewees recalled that they had to go through multiple sources to find information and learn new recipes and had to experiment with plant-based alternatives and adjust their daily routines. They tried to understand the importance of different nutrients and how to obtain them and thereby develop their own lay nutritionism and medical knowledge.

The primary source of information for vegan newbies is the ‘internet’ and online vegan communities (Facebook groups and YouTube blogs). Some interviewees recalled buying books about veganism and watching documentaries. Nonetheless, accessing information does not always mean understanding it. Alice (27/3, ETH) complained that the information on social media could

*The numbers associated with the interviewees' nicknames represent their age and years of vegan practice; the three-letter abbreviation refers to their primary motivation for going vegan or vegetarian (ETH – ethical; ENV – environmental; HEA – health).

often be contradictory, outdated, or not evidence-based and she recalled that she felt confused when she encountered several YouTube bloggers arguing about protein intake:

I stopped eating proteins and focused on carbohydrates. It was good for a while, but then I was hungry all the time and didn't understand what was wrong. At the same time, there was this 'counter-current' – a blogger nicknamed 'The Real Vegan' telling everyone that they were idiots and should start eating proteins (Alice, 27/3, HEA).

One interviewee, when asked about what he would recommend to a beginner vegan, noted that the enormous amount of information available on veganism is a big advantage but can also be rather overwhelming for newbies. Anyone who is not an expert on nutrition can easily get lost in the glut of information and their health may be jeopardised by poor nutrition or a lack of supplementation.

Attitudes Towards and Practices of Supplementation

All the interviewees seemed to be aware of the importance of supplementation. No one in our sample was in principal opposed to taking supplements. At the same time, almost all the interviewees shared the view that a vegan diet is not particularly deficient. Some of them pointed out that some vitamins (for example, vitamin D) should be taken by everyone regardless of their diet. Jan argued that vegans are no different from omnivores and that they do not need to take supplements:

I guess those who do sports, I know they take supplements and think about that, or those who are used to dealing with the nutritional side of (food), probably do this in some way, but I don't believe that ordinary vegans take any supplements (Jan, 49/10, ETH).

It is not too surprising in this context that not all the interviewees take supplements consistently and their supplementation routines can be described as sporadic and irregular. They often used the phrase 'only when I remember', which means that taking supplements is a habit. They also said that the only supplement they try to 'remember' is vitamin B12; the need to take a B12 supplement seems to be common knowledge among vegans. Some interviewees, however, said that they should probably stop neglecting to take supplements.

The vegans we talked to had in most cases begun paying more attention to supplementation only after a certain change in their life – for example, when Edit (35/8, ETH) had started to work out intensively; when Dina (30/11, ETH) became pregnant; when Glorie (49/10, ETH) was advised to take supplements because of her age. Views on supplementation appear thus to be rather flexible and to depend on individuals' health conditions, daily routines, hobbies, or age.

One of the reasons for an inconsistent supplementation routine seems to be a lack of comprehensible resources to rely on.

When I tried (to look for information on supplementation), I found it very complicated and beyond my knowledge or ability to read long texts. I just gave up quickly. I tried clicking on the first three links... And they say I should take B12 (Tomas, 26/1.5, ETH).

Tomas would have welcomed a vegan guide with essential information for beginners – including recommended supplements. He and many other interviewees said they did not underestimate the importance of supplementation but the lack of concise and easy to understand information makes it difficult to navigate the issue for people who are not medical experts.

Vegans' Experiences with Health Care

We detected three main patterns of how vegans approach health care. The first pattern is 'avoidance': interviewees avoid going to the doctor unless they have an urgent reason to do so. They are largely sceptical of biomedicine and may seek assistance from alternative healthcare providers or use the methods of folk medicine if necessary. The interviewees provided, for example, the following justifications for their approach.

We've had such bad experiences (with doctors) because of Covid, and I don't want to go to the doctor anymore. Chinese medicine, maybe, but (not) regular hospitals... and it wasn't even about veganism! Their approach... I don't want to have anything to do with it (Natalie, 37/10, HEA).

Yeah, those treatment methods, you get antibiotics for everything there, and nobody even looked at me. Fortunately, we don't need to think about it, but maybe if I had a fracture I'd go (to the hospital), but otherwise, I don't want to use Western medicine (Jan, 49/10, ETH).

The second pattern can be described as that of the 'secret vegan'. These vegans regularly see a doctor but they do not tell the doctor that they are vegans unless they believe it to be relevant to the particular case. One reason for this seems to be that they are never sure how this information will be received.

I must admit I keep it from the doctor when I feel it's irrelevant. My last GP knew about it and seemed uninterested, but my current GP doesn't know yet. I've been there only twice so... I want to tell her because I want to do something about my health... I don't know how she'll react (Dina, 30/11, ETH).

We found the 'secret vegan' to be the most common practice among the interviewees in our study. They told us that they behave this way because they want to avoid any disagreements with healthcare workers or that they do not feel comfortable sharing this information.

The third pattern is 'full disclosure': the interviewees inform health workers about their veganism from the beginning. Doctors' reactions may vary, but this does not discourage these interviewees who are used to criticism.

I am monitored by various specialists because of my illnesses, so I go for a check-up and have (blood) samples taken once a year. They do this because they know I'm a vegan, and we have known each other for a long time, so I always know what I'm lacking and what I need to supplement (Tana, 29/6, ETH).

When I told my gynaecologist that I was vegan, she looked like she was going to have a heart attack. She rebuked me. She was so mean (Glorie, 49/10, ETH).

The majority of the interviewees in our study reported negative experiences with healthcare professionals after informing them of their veganism. In their experience, doctors are often judgmental and immediately attribute any health problems to the person's vegan diet without any further examination. Some interviewees recalled healthcare professionals being hostile and criticising them for being 'irresponsible'. The interviewees said they feel they do not receive adequate health care because of preconceptions about veganism and the tendency of doctors to pathologize veganism and to see it simply as a dietary restriction.

(Doctors) don't want to hear it. Once, this doctor told me that they would lock me up here and give me some intravenous injections with animal food and make me eat meat three times a day, and that that would cure me. So I just turned around and left (...) So instead of an examination, they will tell you that it's because you're a vegan, and

if you're a skinny vegan, they see that you are skinny, and that's all they need to know (Kotka, 25/4, HEA).

And even when they are not downright hostile to veganism, some doctors are not able or willing to provide personalised care. One of the interviewees, Zuzana (27/9, ETH), forwarded to us the following email conversation she had with her GP:

January 6, 2020, the patient to the doctor:

'Dear Doctor, have you got the results of my tests?'

January 6, 2020, the doctor to the patient:

'Lisa, urine is negative after cultivation. There are no bacteria in the swab, but you have no gut bacteria. I therefore recommend that you buy Hylak forte drops 3x40 drops and it should get better.'

January 7, 2020, the patient to the doctor:

'Thank you, I have already started to take them (the drops). And would you mind telling me what actually was causing my problem?'

January 7, 2020, the doctor to the patient:

'I don't know exactly, there might have been some gut infection (viral), which resulted in dysmicrobia (the absence of physiological gut flora).'

January 7, 2020, the patient to the doctor:

'Clear, OK, thank you! It also might be that as a vegan (not eating any animal products) I don't sufficiently support my gut flora – do you have any advice for me on how to do this in a better way?'

January 7, 2020, the doctor to the patient:

'I do not really agree with veganism, so I don't have any advice. Perhaps take probiotics on a long-term basis.'

Our interviewees reported similar dynamics to what was described in an Estonian study by Aavik, which showed that doctors' biased attitudes can lead vegans to cease seeking advice from healthcare professionals or to not tell them about their veganism (25). This behaviour was common among our interviewees.

There were, however, also some accounts of positive experiences with healthcare professionals. Some doctors, on learning that the interviewee was a vegan, gave them basic advice about supplementation or sent them for blood tests. Not every piece of advice, however, was compatible with veganism.

They suggested that I should at least try eating some (beef) broth, like, you know, it could be good for my health (Lucie, 21/8, ETH).

Edit's account of her interactions with health professionals seems particularly interesting in this context. Edit, who spent several years in Belgium before relocating to the United States, noted that her experience with doctors differed from the stories of fellow vegans living in Czechia that she read on social media. She said that during her first check-up in Brussels, she suddenly felt that she was comfortable telling a health professional that she is vegan:

You know how a person can be afraid (to talk about veganism), but my doctor was great. We talked about it, did the blood tests, and discussed my anaemia. And since that time, I've felt that I can tell doctors about (my veganism). Here, in the US, it was the same. My gynaecologist and my GP know about it. They have it written in my file that I'm fully plant-based (Edit, 35/8, ETH).

Some interviewees admitted that the positive experiences they had with health professionals were due to the privilege of having a doctor in a family:

I have never (had a negative experience with doctors) because I have doctors in the family, and almost all the doctors I visit are our family friends (Tana, 29/6, ETH).

Throughout the interviews, there was a feeling of general frustration among the interviewees, most of whom seemed interested in cooperating with health professionals and getting

regular check-ups and blood tests. Despite that, many of them keep their veganism a secret unless they are lucky enough to have a doctor as a friend. Otherwise, they always have to be ready to encounter criticism and hostility in the healthcare settings.

DISCUSSION

The main findings of this study are that there is a perceived lack of accessible educational materials and information and advice for people who reduce their consumption of animal-based foods; and that vegans may have worse access to primary health care.

Our interview data indicate that vegans pay close attention to the nutritional aspects of their diet and do not generally underestimate the role of supplementation. When people go vegan they tend to conduct their own research on nutrition, animal product substitutes and supplements, but information available on social media and from online sources is not always intelligible, up-to-date, and well evidenced. Unlike many people who are used to visiting a doctor when they have common health issues, vegans tend to put off or avoid seeing health professionals because they are critical and often judgmental of veganism, which results in them attributing vegans' health problems to their 'unconventional' diet.

Except for the vegans who avoid biomedical care altogether, our interviewees indicated that they would appreciate being provided with essential information about supplementation and nutrition risks during check-ups. However, in their experience, health professionals are not always willing or able to provide vegans with the kind of health care they need. Some interviewees noted that even if their doctor is willing, there is not enough time to discuss veganism during a doctor's appointment. Altogether the results suggest that vegans may be unable to access adequate health care for reasons that do not have to do with reluctance or low social status on the part of the patient. It should be pointed out that generally the integration of nutritional counselling into primary care is not optimal, as currently there is no formal policy on this in the Czech Republic (30).

CONCLUSION

Public Healthcare Implications

In this situation, it would be helpful for comprehensive information compiled by relevant authorities to be published and made easily available. Of note, there are currently no actual food-based dietary guidelines for the general population in the Czech Republic either, though the methodological basis has been laid (31,) and a number of comprehensive publications have been produced by the Ministry of Health, the National Institute of Public Health and the Society for Nutrition that focus on the diet of the general population (32). As for vegans, there are no official nutritional recommendations for the Czech population on how to maintain a healthy and nutritionally adequate vegan diet. Ideally, this material would serve as a primary source of information for vegans and at least supplement existing unofficial resources available online or elsewhere, which do not always provide up-to-date or valid information. It is important that official nutritional recommendations acknowledge vegan and more plant-based diets

as a positive contribution to planetary health, one that is, however, accompanied by a few individual health risks that are difficult to avoid even in the case of a healthy balanced diet. These risks can in the case of most people be managed with a relatively simple supplementation regime. The information needs to clearly spell out that supplementation is a long-term preventative measure and should be implemented regardless of the current subjective sense of physical well-being of individual vegans.

At the same time, it is similarly important that information, mentoring, and guidance are provided to healthcare professionals on how to relate to their vegan patients so that they can provide the best possible care, tailored to this population, and communicate with vegans so that they are not intimidated and effectively driven out of the healthcare system or made to feel like second-class patients. Pathologizing veganism and vilifying vegans as irresponsible is an unhelpful communication strategy.

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Conflicts of Interest

None declared

Adherence to Ethical Standards

The sociological research was carried out according to the Code of Ethics of the Czech Association for Social Anthropology.

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