

Veganuary 2016 Participant Research and Impact

Project Background

Launched in the United Kingdom in January 2014, Veganuary is a global campaign that encourages people to try eating a vegan diet for the month of January. The campaign has grown rapidly and now includes a comprehensive website that provides useful information to current and would-be vegans. Following Veganuary 2015, the team conducted an <u>internal analysis</u> of the campaign's impact. For 2016, the Veganuary team enlisted the help of Faunalytics to improve upon the analysis and collect additional data.

In summary, 22,951 people were officially registered for Veganuary 2016, which includes those who signed up on the website and some individuals who were added directly by the Veganuary team. For our analysis, we considered someone a participant in Veganuary 2016 if they were registered between February 1, 2015 and January 15, 2016. Faunalytics came into the project after the 2016 campaign was already launched and the registration form and questions had been left unchanged from previous years.

Working with Veganuary, Faunalytics designed a follow-up survey and added food frequency questionnaires to evaluate participants' diets both during the month of January 2016 and in the first week of February 2016. The survey invitations were sent from February 8-11, 2016, with additional survey reminders sent during the following 7-10 days. The survey was sent to all participants from all years, but the analysis focuses on those who signed up for Veganuary 2016, specifically. In total, 5,195 people responded to the follow-up survey, though this number is lower for some questions due to branching and partial responses.



Summary of Findings

Registration Data

Those who signed up directly on the website completed a short survey with questions about their diet, demographics, their reason for signing up, and where they heard about Veganuary. The registration results for 2016 participants (N=22,951) are summarized below.

- DIET: 34% of registrants self-identified as omnivores, while 12% said they were pescetarian, 34% identified as vegetarian, and 19% identified as vegan.
- GENDER: The vast majority of registered participants were female (87%), while 12% were men and 2% said "other" or preferred not to answer.
- AGE: 30% of registrants were under age 25, while 29% were 25-34, 19% were 35-44, and 22% were age 45 or older at the time of registration.
- COUNTRY: Veganuary 2016 participants included people from 142 different countries. A majority hailed from either the UK (34%) or the US (26%), with Australia (7%) and Canada (4%) also represented. No other country accounted for more than 1% of respondents.
- REASON: When asked why they took part in Veganuary, most 2016 participants selected animals (54%) followed by health (33%) and then the environment (13%). *Note: participants were only able to select one of these three motivations.*
- SOURCE: A majority of registrants heard about Veganuary on Facebook (54%). By comparison, few people selected any other source: 13% heard about it through a friend's recommendation, 9% through the media, 5% through Instagram, and 4% through Twitter.

Follow-Up Survey Data

Veganuary participants were re-contacted in February 2016 to determine their level of participation and their diet during the week following Veganuary. Due to the use of a shared database, follow-up survey invitations were sent to participants from *all years* of Veganuary. Our analysis of follow-up survey results focuses on those who participated in Veganuary 2016, but we were unable to fully exclude previous participants. Survey respondents were offered a chance to win \$100 in cash and we sent multiple reminder emails to non-respondents. After data cleaning, we had a total of 5,195 completed surveys, which is a response rate of 23% counting only registrants from Veganuary 2016. The follow-up survey results are summarized below.

- GENDER: Similar to the registration data, the vast majority of follow-up survey respondents were female (88%), while 12% were men and 1% said "other" or preferred not to answer.
- AGE: The age profile was also somewhat similar: 24% of follow-up respondents were under age 25, while another 29% were 25-34, 20% were 35-44, and 27% were 45 or older.



- SIGNUP: Nearly all of those who completed the follow-up survey (95%) say they signed up on the website. The vast majority signed up as individuals (95%), while 5% signed up as groups. Of those who signed up on behalf of groups, the average group size was 2.7 people.
- PRIOR DIET: When asked what their diet was prior to participating in Veganuary, 25% noted that they were an omnivore, 12% said they were pescetarian, 40% were vegetarian, and 22% were vegan. There were inconsistencies in some individuals' pre-Veganuary diet reported during registration compared to the data reported during the follow-up survey, which we discuss later.
- VEGANS: For participants who were already vegan prior to Veganuary (in this instance, based on their follow-up survey responses), their main reasons for signing up were to support the campaign and spread awareness of veganism, get recipes and meal ideas, for general information, and to support others transitioning to veganism. Note that these are the major themes that emerged from coding a random sample of 100 open-ended responses to this question. Essentially all of these vegan respondents (99%) say they continued eating vegan during the month of January.
- ADHERENCE: For participants who were not already vegan prior to Veganuary (again, based on followup survey responses), 70% said they ate a vegan diet for the entire month of January. Among those who did *not* maintain the diet for the entire month, 22% did so for 10 days or less, 39% maintained the diet for 11-20 days, and 40% stuck to a vegan diet for 21 days or more. These results are likely impacted by people who signed up between January 1st and January 15th, 2016.
- VEGAN MEALS: Among non-vegans who were unable to maintain the diet for the full month of January, a plurality of 43% said that 75-99% of their meals during the month were vegan. Another 28% of participants said that 50-74% of their meals were vegan, while 28% estimated that fewer than half of their meals in January were vegan.
- ACTUAL DIET: Non-vegan participants were provided with a food frequency questionnaire to identify how often they consumed each animal product during January. While we do not have the same level of detail *prior* to January to make comparisons, we intend to compare this data with results from a future follow-up survey. We coded the responses and found that 51% of participants ate a vegan diet during January, 24% were vegetarian, 9% were pescetarian, and 16% were omnivores.
- INTENTIONS: Encouragingly, the vast majority (81%) of those non-vegans who made changes during Veganuary say they plan to continue those changes. Another 13% of participants said they were unsure, and only 4% said they did not plan to continue the changes.
- TIME LIMIT: When non-vegan participants were asked about the importance of Veganuary's timelimited aspect, responses were mixed. 39% said it was "extremely" or "very" important, while 38% said it was "somewhat" important and 23% said "not very" or "not at all" important.
- SELF-MOTIVATION: Non-vegan follow-up survey respondents were also asked the likelihood that they
 would have tried veganism on their own sometime in 2016 without participating in Veganuary. About
 half (51%) said they would have been "extremely" or "very" likely to do so, while 28% said
 "somewhat" likely and 20% said "not very" or "not at all" likely.



- CHALLENGES: When asked what challenges they experienced during Veganuary, the responses were numerous and quite varied. Easily the most common challenge was maintaining a vegan diet when eating out (or ordering takeout food), especially when with larger social groups. The next most common challenges were giving up dairy (especially cheese), reactions from family and friends, preparing meals, and avoiding non-vegan ingredients. These are the major themes that emerged from coding a random sample of 100 open-ended responses to this question.
- BENEFITS: About two-thirds of respondents (68%) said they experienced generally better health during Veganuary, while only 2% experienced generally worse health. A slight majority of 56% respondents say they had more energy, while 7% had less energy. Finally, nearly half (49%) said they lost weight, while 8% said they gained weight during Veganuary. About a fifth of respondents also wrote in other changes they experienced; these responses are not analyzed, but are worth scanning.
- POST-DIET: Participants were provided a food frequency questionnaire to identify how often they consumed each animal product during the *first week of February*. We coded the responses and found that most people appear to be maintaining the diet. More than half (57%) of participants reported being vegan during the week, 24% were vegetarian, 7% were pescetarian, and 12% were omnivores. We take a closer look at individual-level changes in the next section.
- USEFULNESS: Survey respondents rated different aspects of the Veganuary campaign or website according to their usefulness. After removing those who did not use them, the most useful resources were recipes (74% say "extremely" or "very" useful), the daily emails (62%), and the product directory (62%), followed closely by the "myths" section (61%), the vegan starter kit (60%), and the eating out guide (58%). The Twitter (24%) and Instagram (32%) feeds were considered *relatively* less useful. The usefulness of other aspects of the campaign/website fell within these ranges.
- RECOMMENDED: An impressive 99% of follow-up survey respondents more than 5,000 people say they would recommend Veganuary to others.
- OTHER FEEDBACK: When asked if they have any other feedback, most survey respondents did not
 provide specific suggestions, but instead took the opportunity to make positive comments about
 Veganuary. Most of these were general in nature. Interestingly, one theme that stood out was also
 somewhat contradictory: some people asked for more UK-specific content and products, while others
 asked for information tailored to other countries and languages. This is based on coding a random
 sample of 100 open-ended responses to this question.



Dietary Changes

To determine the extent of diet change among participants, we examine three time periods: diet before Veganuary; diet during the month of January; and diet during the first week of February. For the participant's diet prior to Veganuary, we use registration data because it should be more accurate than retrospective data from the follow-up survey. However, there are some concerns with how the signup diet question was asked and we are missing registration information for some respondents.

Additionally, there is a large amount of discrepancy between self-reported dietary status before Veganuary and the retrospective status for the same time period provided in the follow-up survey. In fact, more than a fourth of follow-up survey respondents (29%) provided inconsistent diet data when comparing these two questions. The reason for this is unknown but may be due to a combination of factors including definitional issues, social desirability bias, and problems with recall. With these caveats in mind, here is a summary of participants' self-reported diets by phase:

	Prior to Veganuary* (Label question at signup, N=20,597)	Prior to Veganuary (Label question, retrospective, N=5,195)	During January (FFQ, N=4,049 non-vegans)	First Week of February (FFQ, N=4,049 non-vegans)
Omnivore	34%	25%	16%	15%
Pescetarian	12%	12%	9%	9%
Vegetarian	34%	40%	24%	29%
Vegan	19%	22%	51%	46%

* We use this data for calculating diet changes.

Diet During January

As noted in the previous table, about half of Veganuary follow-up survey respondents (51%) ate a vegan diet during the month of January (excluding those who were already vegan). The response varies slightly by type of diet. For instance, 43% of those who were omnivores coming into Veganuary ate a vegan diet during January, while 16% report eating a vegetarian diet, 9% say pescetarian, and 33% continued an omnivorous diet. A similar proportion of pescetarians (44%) ate a vegan diet during January, while a slightly larger proportion of vegetarians did so (53%). These differences are noted in the table below.

		Diet During Month of January (FFQ)			
		Omnivore	Pescetarian	Vegetarian	Vegan
Diet Before Veganuary	Omnivore	33%	9%	16%	43%
	Pescetarian	13%	26%	17%	44%
	Vegetarian	9%	6%	32%	53%



To get a more accurate sense of behavior change, however, we must examine differences at the individual versus the group level. As summarized in the table below, overall slightly more than half of non-vegan participants (53%) made a "positive" change (reduced animal products) from before Veganuary compared to during the month of January. A third of participants (34%) reported no major changes and about one in eight participants (13%) appeared to start consuming *more* animal products during the month of January. In summary, the table shows that, for the month of January, 44% of Veganuary participants became new vegans, 7% became new vegetarians, and 2% became new pescetarians.

Diet Pre-Veganuary Vs. Diet During Month of January		
"Positive" Changes	53%	
Omnivore > Pescetarian	2%	
Omnivore > Vegetarian	4%	
Omnivore > Vegan	13%	
Pescetarian > Vegetarian	2%	
Pescetarian > Vegan	6%	
Vegetarian > Vegan	25%	
"Negative" Changes	13%	
Vegan > Omnivore	1%	
Vegan > Pescetarian	1%	
Vegan > Vegetarian	2%	
Vegetarian > Omnivore	4%	
Vegetarian > Pescetarian	3%	
Pescetarian > Omnivore	2%	
No Changes	34%	
Omnivore > Omnivore	10%	
Pescetarian > Pescetarian	4%	
Vegetarian > Vegetarian	15%	
Vegan > Vegan	6%	



The data in the previous table are based on coding responses to a food frequency questionnaire (FFQ), which results in strict definitions for "vegan" and "vegetarian." However, the impact of Veganuary likely goes beyond what is captured by these strict definitions, as evidenced by the fact that those who did *not* adhere to the diet still ate a majority of vegan meals. They also dramatically reduced how often they ate meat and other animal products. For instance, 85% of those who were omnivores prior to Veganuary did not eat any pork during January, 75% did not eat any chicken, and 69% did not eat any fish/seafood. Dairy and eggs proved more difficult, with only about half of omnivores avoiding them for the entire month.

Diet in Early February

As an *early indicator* of how many people intend to continue with their diets after Veganuary, we timed the follow-up survey to be able to ask about participants' diets during the first week of February. This is a rough indicator because some people may have started the challenge late and decided to continue for a full month. Others may have felt compelled to answer in a manner consistent with the goals of the Veganuary campaign. With those caveats in mind, the results for the first week of February are very similar to the month of January, which suggest that many non-vegan participants are continuing the changes they made.

		Diet During First Week Of February			
		Omnivore	Pescetarian	Vegetarian	Vegan
Diet Before Veganuary	Omnivore	34%	10%	17%	38%
	Pescetarian	9%	26%	27%	37%
	Vegetarian	6%	4%	36%	54%

Again, we get a more accurate picture of behavior change when we review differences at the individual instead of the group level. As summarized in the table on the next page, half of participants made a "positive" change (reduced animal products) from before Veganuary compared to the first week of February. Four in ten participants (40%) did not change diet categories over this time period, while 9% report having *increased* their consumption of animal products.



Diet Pre-Veganuary Vs. Diet During First Week of February		
"Positive" Changes	50%	
Omnivore > Pescetarian	3%	
Omnivore > Vegetarian	5%	
Omnivore > Vegan	10%	
Pescetarian > Vegetarian	4%	
Pescetarian > Vegan	5%	
Vegetarian > Vegan	23%	
"Negative" Changes	9%	
Vegan > Omnivore	1%	
Vegan > Pescetarian	0%	
Vegan > Vegetarian	2%	
Vegetarian > Omnivore	3%	
Vegetarian > Pescetarian	2%	
Pescetarian > Omnivore	1%	
No Changes	40%	
Omnivore > Omnivore	11%	
Pescetarian > Pescetarian	4%	
Vegetarian > Vegetarian	18%	
Vegan > Vegan	7%	

It is interesting to note the differences between the two sets of numbers comparing participants' pre-Veganuary diet with their diets in January and in the first week of February. While many people struggled to maintain a fully vegan diet for the entire month of January, a surprising proportion of people seem to be continuing reductions in early February. This suggests that the impact of Veganuary may be long-term for many participants, something we hope to validate with the six-month follow-up survey.

Again, it is also noteworthy that participants eliminated *individual* animal products at a higher rate. For instance, 87% of omnivores (prior to Veganuary) did not eat any pork during the first week of February, 76% did not eat any chicken, and 69% did not eat any fish/seafood. Eggs and especially dairy products were again more challenging for participants to continue avoiding, with only about half of omnivores saying they "never" ate these products during the first week of February.



If we assume the diets that participants reported for the first week of February are both accurate and sustained, then more than a third of Veganuary participants became vegan. An additional 9% became vegetarian and 3% became pescetarian. If we assume further that these follow-up survey respondents are representative of *all* Veganuary 2016 participants who were not already vegan, then this year's campaign will have produced 6,269 new vegans, 1,575 new vegetarians, and 533 new pescetarians. An estimate of the impact that these new eliminators and reducers of animal products have had in terms of farmed animals spared will be provided as an addendum.



Preliminary Conclusions

Following are Faunalytics' initial conclusions about the overall effectiveness of Veganuary 2016. We consider these "preliminary" because of the limitations discussed in the next section and because we hope to have more data with which to draw conclusions after the six-month survey.

- **KEY AUDIENCES.** The gender and age profiles are fairly consistent from the registration data collected prior to Veganuary to the data gathered in the follow-up survey. Clearly, Veganuary is most appealing to women; nearly nine of every ten participants are women. About half of participants are between the ages of 25 and 44, with nearly a third being under age 25 and just over a fifth being over age 44. Veganuary 2016 had relatively few participants under age 18 or over age 54.
- EXISTING VEGANS. To some extent, the Veganuary 2016 campaign was "singing to the choir." About one-fifth of participants were already vegan prior to taking part. However, it is clear from the open-ended comments that Veganuary provided an important support mechanism for people who were already vegan, some of whom had become vegan in the months prior to Veganuary. It also gave them a valuable tool to persuade others to try veganism without making a big commitment.
- WOULD-BE VEGANS. About half of participants said that they would have been "extremely" or "very" likely to try veganism on their own sometime in 2016. But the verbatim comments suggest that the coordinated month-long campaign provided an impetus for people who either used to be vegan or had been considering it. The time limit was part of this, with three-fourths of participants noting that having a time-limited goal of being vegan for a month was at least "somewhat" important.
- **NEW VEGANS.** With the caveats previously noted, more than a third of participants say that they ate an entirely vegan diet for at least the week following Veganuary. More than half of these people were already vegetarian, but about a fourth were pescetarian and 13% were omnivores. This would seem to be a strong conversion rate and a surprising number of people who are maintaining the diet post-Veganuary. The six-month survey will be a better indicator of whether or not changes are sustained.
- **NEW REDUCERS.** While creating new long-term vegans is the ultimate goal of Veganuary, there is also benefit to create new animal product *reducers*. There is evidence that those who were not vegan in the first week of February still reduced their consumption of animal products. Unfortunately, these participants were *least likely* to eliminate chicken or fish/seafood from their diets, and consumption of these species has the greatest impact on lives saved.
- EATING OUT. Regarding the challenges faced by Veganuary participants, eating out seems to present the most problems, followed by cheese-related temptations. Some of this is inevitable given the global nature of Veganuary and the lack of widespread vegan options, and the campaign already focuses on dining options. But it may be worth focusing more on options for eating out, cheese alternatives, and reinforcing the idea that one need not be a "perfect" vegan to have a positive impact.



Limitations

This analysis is subject to a number of limitations, perhaps most notably the reliance on self-reported data that shows a large amount of inconsistency. As mentioned earlier, more than a fourth of follow-up survey participants provided diet data that was inconsistent with their pre-Veganuary registration data. This discrepancy has an unknown impact on the results, but it is likely substantial. Following are the other major limitations for the study and we present ideas for overcoming some of these challenges in the next section.

- REG DATA: We understand that manually registering people for Veganuary is an important way of increasing the number of participants, but the lack of baseline data for these respondents limits the analysis. Roughly 10% of the registered participants are missing baseline diet and demographic data, which means we are unable to assess before-and-after changes for these participants.
- REG QUESTIONS: The registration questions may have had definitional and/or formatting issues. We have already mentioned the use of a general label question instead of a food frequency questionnaire. The self-reporting as omnivore, pescetarian, vegetarian, or vegan also may have been influenced by the specific definitions (including terms like "flesh") in the registration form. Additionally, these definitions were only available when *hovering* over the answer options. It is unclear what effect these had on the results, but the lack of more detailed baseline diet data is a major limitation.
- PAST PARTICIPANTS: Including people from past years of Veganuary without confirming their participation in 2016 likely impacted the quality of responses and the response rate. While our analysis focused on those who participated in 2016, the combined registration database makes it difficult to identify relevant respondents. Also, allowing registration year-round means that some people will have signed up almost a year before taking part in Veganuary while others signed up on the first day. For the follow-up survey there was a clear difference in response rate based on signup date.
- LATE PARTICIPANTS: Another potential timing issue is the large number of participants who registered for Veganuary *after* the campaign had begun. Specifically, more than a fourth of those that we count as 2016 participants registered between January 2 and January 15. We did not eliminate these respondents or control for the registration date in our analysis. This undoubtedly influences some of the survey results, in particular the diet question for the month of January.
- RESPONSE: The participant response rate to the follow-up survey was 23%, which is decent for a study like this. However, it still leaves substantial room for nonresponse bias, which is the possibility that there are major differences between those who did or did not respond to the survey. As a result, we cannot be sure that the follow-up survey responses are representative of all participants.
- SOCIAL DESIRABILITY: Finally, it is possible that social desirability bias is influencing the results. This may be true at the registration stage given that the goals of Veganuary are clear, but it is likely a bigger factor in the follow-up survey responses because some participants may feel compelled to provide an answer that is consistent with the change Veganuary is trying to achieve.



Suggestions for Future Evaluations

The Veganuary team are to be congratulated for your interest in measuring the campaign's impact. The internal analysis completed in 2015 was a solid effort and Faunalytics believes we have helped improve upon the accuracy of that analysis in 2016. However, there are several opportunities to improve future evaluations of Veganuary's impact, the most important of which are described below. We understand that what is best from a research standpoint may not be ideal for the promotion and growth of Veganuary, however, and know that not all of these suggestions may be possible.

- REG DATABASE: It would be ideal to separate Veganuary participants from the year-round support emails using different (but linked) databases or segments. For instance, Veganuary could maintain a "master" file of all participants across all years and a separate file (or segment) of participants for each year. This would require asking past participants to sign up again for subsequent campaigns. If doable, this would help address several of the limitations mentioned in the previous section.
- MAILCHIMP: Separating the registration data may be possible by having multiple segments defined within MailChimp and delineating between past and current participants, (though a more sophisticated approach might be best). Per above, this would help avoid surveying people who only participated in past years, producing a "cleaner" dataset. Using MailChimp for the registration form might also provide cleaner data and the ability to more easily segment registrants. If we are able to link Survey Monkey with MailChimp, then all respondent data would be in one place.
- REG TIMING: From a research perspective, it might be best to restrict the "official" Veganuary signup to a shorter period of time. For instance, this could include opening the registration process on November 1st and closing registration on January 1st. This would allow for better separation of respondents by year of participation, though we understand the approach also has downsides. That said, having a deadline might provide an impetus for some people to participate.
- REG QUESTIONS. It is important to collect FFQ-level data during registration to avoid definitional issues and over-reporting with meat-free diets, which the literature suggests is commonplace. Even a simplified FFQ would be a substantial improvement over allowing people to self-select a label, especially when restrictive definitions are provide for those labels. This level of detail would also be useful to analyze behavior change at the individual animal product level.
- RESPONSE. Although it is always a challenge, future evaluations should make an effort to increase the response rate. Some potential strategies to accomplish this include surveying only the current year's participants (for whom the survey is most relevant), shortening the follow-up survey to just the most critical diet questions, and offering individual incentives or a larger "lottery" incentive.