

Study of Current and Former Vegetarians and Vegans

initial findings • december 2014

Team: Kathryn Asher, Che Green, Dr Hans Gutbrod, Mirna Jewell, Dr Galina Hale & Dr Brock Bastian • Sponsors: Animal Welfare Trust, VegFund, FARM & Stephen Kaufman, MD • Acknowledgements: Jack Norris, Nick Cooney & Matt Bear

© Humane Research Council 2014



Introduction

This HRC study estimates the number of current and former vegetarians/vegans and examines key factors in people's decisions to either adopt or give up a vegetarian or vegan diet. Given the large and complex nature of the study, the findings are being released in phases. This first set of findings compares individuals who currently eat a vegetarian or vegan diet with those who have been vegetarian or vegan in the past but now consume meat. The full methodology, including the stringent criteria used to identify current and former vegetarians/vegans, is presented in the *Companion to the Initial Findings* report, released alongside this document. The companion document also includes detailed tables. The study's sample is very large (over 11,000 respondents) and is representative of those aged 17 and over in the U.S. While others have estimated the number of current vegetarians/vegans using a representative sample, this study is the first to estimate the number of *former* vegetarians/vegans in the U.S. using a representative sample.

Key Takeaways & Recommendations (based on what we see in the data at this initial stage)

In the U.S., there are more than five times the number of former vegetarians/vegans compared to current vegetarians/vegans. It is clear that there are serious retention issues when it comes to these diets. The animal protection movement is experiencing far greater success with adoptions than with adherence. With 2% of the U.S. population considered to be a current vegetarian/vegan, these individuals are very much innovators when it comes to the diffusion of vegetarianism and veganism. Given that there is considerable ground to cover before a tipping point is reached, it is no surprise that vegetarians/vegans today have difficulty maintaining a diet that positions them in the margins of society.

It is unclear if there are inherent difficulties with vegetarian/vegan diets, or if lapses are due more to the burden of eating a diet that is outside the norm. However, it is easy to see how many of the potential difficulties (taste, convenience, social dynamics, identity, etc.), could be tempered following greater uptake from others and a subsequent increased interest in animal-free products by food manufacturers. Likewise, there is the possibility that some of the challenges stem from individuals carrying out the diets in a way that puts them at a disadvantage, whether transitioning too quickly, neglecting key nutrients, isolating themselves from other vegetarians/vegans, being unsuccessful in finding ways to mitigate cravings and temptations, etc. Indeed, some of the difficulties that arise from vegetarian/vegan diets may not be too dissimilar from the challenges individuals face when adhering to other dieting practices (whether for weight loss or otherwise).

Given that current vegetarians/vegans are a small proportion of people in the U.S., and that they are far outnumbered by lapsed vegetarians/vegans, the animal protection movement may wish to consider adapting its approach to food-focused appeals in two ways:

Improve Vegetarian/Vegan Retention

- **Target Demographics** – Target outreach activities toward those who are most likely to adhere to the diet. Current and lapsed vegetarians/vegans differ significantly when it comes to their political orientation and religious beliefs. Current vegetarians/vegans are also more likely to have adopted the diet at a younger age and to have transitioned more gradually.
- **Update Materials** – 1) Design outreach and supporting efforts to address the most common difficulties faced by former vegetarians/vegans, including: cravings and boredom with food options; insufficient interaction with other vegetarians/vegans; not being actively involved in a vegetarian/vegan community; not seeing the diet as part of their identity; disliking that their diet made them “stick out from the crowd;” and feeling it was too difficult to be “pure” with their diet. Interestingly, health did not present a noticeable difficulty for study participants, with the exception of vitamin B12 monitoring. 2) Consider increasing awareness about the importance of B12: a far greater percentage of former (76%) than current (42%) vegetarians/vegans never had their B12 levels checked while they were adhering to the diet. 3) Think about barriers in the domestic sphere, including the fact that 33% of former vegetarians/vegans were living with a non-vegetarian/vegan significant other when they lapsed. With about a third (34%) of lapsed vegetarians/vegans reporting that they ate the diet for three months or less, the window for advocates to help individuals find ways to sustain their vegetarianism/veganism is small.
- **Diversify Messaging** – Current vegetarians/vegans report a broader range of motivations for eating their diet than do former vegetarians/vegans. While the only motivation cited by a majority of former vegetarians/vegans (58%) was health, a number of motivations were identified by a majority of current vegetarians/vegans: health (69%), animal protection (68%), concern for the environment (59%), feelings of disgust about meat/animal products (63%), and taste preferences (52%).
- **Focus on Lapsed Vegetarians/Vegans** – More than a third of former vegetarians/vegans are interested in re-adopting the diet, and a majority of these individuals say they are likely or very likely to do so, with health being the primary motivator. Of note, almost a third (30%) of former vegetarians/vegans had a lapse from the diet prior to their present abandonment. While it appears many former vegetarians/vegans were interested enough in a meat-free diet to give it another try, by the same token, this means that there were difficulties (on more than one occasion) that were not surmountable.

Emphasize Reductions

The movement’s success can be measured by the increase in the number of vegetarians and vegans, but even more telling is the decrease in the number of animals used for food. Yet it is possible that focusing on the former (at least for now) may limit gains when it comes to the latter. In other words, with the proportion of vegetarians and vegans presently at just 2%, advocates may achieve greater gains for farmed animals by promoting animal product reduction and/or the elimination of key foods (notably chicken and fish). Lending support to this is that fact that there is thought to be an abundance of meat reducers and that their numbers are on the rise.

Farmed animals may, therefore, benefit more from efforts focused on encouraging the many to reduce their animal product consumption as opposed to inspiring a relatively small fraction to achieve total elimination of animal-based foods. Lending support to this is the finding that 43% of lapsed vegetarians/vegans in our study felt it was too difficult to be “pure” with their diet. In addition, while 21% of our sample self-identified as a former vegetarian/vegan, only about half (49%) of these individuals met our definition of vegetarianism (no meat) or veganism (no animal products), which also suggests difficulty achieving dietary purity.

There are several potential approaches to messages emphasizing reduction of animal products. A common technique is to advocate vegetarianism/veganism, with allowances for a gradual move in that direction in the interim. It is also possible that by solely promoting a call for vegetarian/vegan diets, individuals will take piecemeal steps on their own or even adopt the diet and then subsequently abandon it, but with comparatively reduced animal product consumption. However, it may be more advantageous to increase efforts to promote reductions and/or elimination of specific foods. To help clarify which path is most effective, the movement should consider one or more studies that explores the impact on farmed animals of delivering a pro-vegetarian/vegan message (both with and without allowances for interim steps) compared to solely advocating specific combinations of reductions/eliminations.

A note on promoting changes in consumption for specific foods. Our findings speak to the popularity of chicken. A greater proportion of U.S. omnivores (with and without a history of vegetarianism/veganism) consume chicken (95%) compared to any other type of meat including beef (89%), pork (83%), turkey (79%), fish (76%), seafood (62%), or other meats including duck, lamb, rabbit, deer, goat, etc. (26%). (However, we do not know the actual frequency of consumption for this group.) Chicken was also the most popular meat among former vegetarians/vegans in terms of current daily frequency of consumption. If the goal is to see the greatest decrease in the number of animals used for food (and this, admittedly, may not be the goal of every advocate), chickens warrant increased attention given that far more animals are needed to produce chicken meat than equivalent amounts of meat from other land-based farmed animals (cows, pigs, turkeys, etc.). Fish present a similar issue.

As the number of people reducing meat and other animal products continues to grow, it is likely that adhering to a vegetarian/vegan diet may become easier. This will likely be due to the advent of better tasting alternatives, greater social support, fewer sources of inconvenience, less need to see the diet as part of one’s identity, and fewer instances where adherents “stick out from the crowd” in ways that make them uncomfortable. When these steps are achieved, placing more emphasis on advocating complete vegetarianism/veganism may prove more effective to maximize the number of animals impacted.

Proportion of the Population

Table 1 shows the proportion of *former* vegetarians/vegans in the U.S., while Table 2 shows the proportion of *current* vegetarians/vegans in the U.S. (both aged 17+ years).

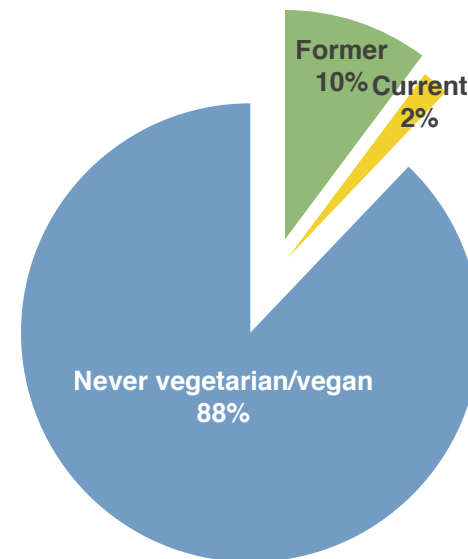
Table 1. Prevalence of Former Vegetarians/Vegans

Former vegetarians	9.1%	<i>n</i> = 1,037
Former vegans	1.1%	<i>n</i> = 129
Former vegetarians/vegans	10.2%	<i>n</i> = 1,166
Sample <i>n</i> = 11,399		

Table 2. Prevalence of Current Vegetarians/Vegans

Current vegetarians	1.5%	<i>n</i> = 167
Current vegans	0.5%	<i>n</i> = 54
Current vegetarians/vegans	1.9%	<i>n</i> = 221
Sample <i>n</i> = 11,399		

Chart 1. Prevalence of Current & Former Vegetarians/Vegans



There are more than five times as many former vegetarians/vegans than there are current vegetarians/vegans. Put differently, 84% of vegetarians/vegans abandon their diet. Only a very small proportion (2%) of the U.S. population (aged 17+) is considered to be a current vegetarian/vegan. Extrapolating these figures to the U.S. population as a whole, we estimate there would be over 24 million former vegetarians/vegans compared to less than 5 million current vegetarians/vegans.* Interestingly, while 86% of *lapsed vegetarians* abandon their diet, a smaller proportion (70%) of *lapsed vegans* do so, suggesting that while people are far less likely to adopt a vegan diet, vegans are also less apt to start opting for meat.

Note: we sampled from a population that was generally representative of the U.S. and used this to approximate the population estimates, however there are limitations to that approach.

Demographics

There is a statistically significant difference between current and former vegetarians/vegans when it comes to some key demographic variables (see Table 3):

- Former vegetarians/vegans are older (average age is 48 years compared to 42 years for current vegetarians/vegans).
- The groups differ in their political leanings.
- The groups differ in their religious affiliations.

Interestingly, there is no statistically significant difference between the two groups in terms of gender, education, race/ethnicity, or region of the U.S. (Northeast, Midwest, South, and West).

Compared to the U.S. population as a whole (51% female), there is a far higher proportion of females among both current (74%) and former (69%) vegetarians/vegans. *(Note: our sample was 58% female and so deviated slightly from the U.S. population.)*

Transitions

There are statistically significant differences regarding how current and former vegetarians/vegans transitioned to the diet. Former vegetarians were more likely to have adopted the diet at an older age (average of 34 years versus 25 years for current vegetarians/vegans). They also transitioned to the diet more abruptly: 65% transitioned over a matter of days/weeks, compared to 53% of current vegetarians/vegans.

Adherence

There are statistically significant differences when it comes to how long current versus former vegetarians/vegans have adhered to the diet. Specifically, former vegetarians/vegans do not have as much longevity with their diet: about a third (34%) maintained the diet for three months or less, compared to 5% of current vegetarians/vegans. Also noteworthy is that 53% of former vegetarians/vegans adhered to the diet for less than one year, compared to 12% of current vegetarians/vegans. This suggests the window for advocates to help individuals find ways to sustain their vegetarianism/veganism is small.

Significant Others

About half (49%) of former vegetarians/vegans were living with a significant other when they stopped eating the diet. A third (33%) of former vegetarians/vegans were living with a non-vegetarian/vegan significant other when they lapsed—a finding that points to possible barriers in the domestic sphere.

Table 3. Demographic Characteristics

		Former vegetarians/vegans	Current vegetarians/vegans
Average age		48 years	42 years
Political orientation	Conservative	21%	14%
	Neutral	41%	34%
	Liberal	39%	52%
Religion	Christian (Catholic, Protestant, etc.)	47%	34%
	Jewish	5%	3%
	Buddhist or Hindu	3%	9%
	Other religion (including two or more)	5%	7%
	Do not actively practice a religion	40%	47%

Motivations for Eating a Vegetarian/Vegan Diet

Participants were asked about their motivations for eating a vegetarian/vegan diet. Table 4 shows that current vegetarians/vegans reported a broader range of motivations for their diet than did lapsed vegetarians/vegans. While the only motivation cited by a majority of former vegetarians/vegans was health, a number of motivations were identified by a majority of current vegetarians/vegans: health, animal protection, concern for the environment, feelings of disgust about meat/animal products, and taste preferences. Therefore, in an effort to encourage maintenance it may be wise to promote a range of motivations.

There is a statistically significant association between nearly all of the motivations tested and whether an individual is a current or former vegetarian/vegan, with the exception of cost, social influence, and wanting to follow a food trend.

Note: it is possible that in answering this question in retrospect, lapsed vegetarians/vegans downplayed the motivations they once had or that current vegetarians/vegans identified more motivations than they had initially.

Health

Former vegetarians/vegans were asked if they began to experience any of the following when they were eating a vegetarian/vegan diet: depression/anxiety, digestive problems, food allergies, low cholesterol, an eating disorder, thyroid problems, protein deficiency, B12 deficiency, calcium deficiency, iron deficiency, iodine deficiency, vitamin A deficiency, vitamin D deficiency, zinc deficiency. The findings show that:

- 71% of former vegetarians/vegans experienced none of the above. It is quite noteworthy that such a small proportion of individuals experienced ill health.
- All of the conditions were experienced by some participants, though only rarely. In each case, less than 10% of lapsed vegetarians/vegans experienced one of these issues, except iron deficiency (experienced by 11%).
- Respondents who indicated they began to experience at least one of the conditions were asked if it improved after they started eating meat. 82% of these respondents indicated that some or all of the conditions improved when they reintroduced meat. The most typical timeframes for improvement were: within 2–6 days (20%), within 1–3 weeks (33%), and within 1–3 months (22%).

In terms of vitamin B12, a far greater proportion of former (76%) than current (42%) vegetarians/vegans say they have never had their B12 levels checked while they were adhering to the diet. Further, 26% of former and 16% of current vegetarians/vegans indicated that none of the B12 foods listed in the survey were a regular part of their diet. These included: fortified meat alternatives, fortified non-dairy milk, fortified breakfast cereals, multivitamin, fortified nutritional yeast, and B12 supplements. (*Note: these foods were asked in a list with other “distractor” foods to mask the purpose of the question.*)

Table 4. Reasons for Vegetarianism/Veganism

	Former vegetarians/vegans	Current vegetarians/vegans
Health	58%	69%
Taste preferences	31%	52%
Animal protection	27%	68%
Feelings of disgust about meat/animal products	27%	63%
Concern for the environment	22%	59%
Cost	16%	21%
Social influence (from friends, family, significant other, etc.)	15%	11%
Social justice or world hunger	12%	29%
Religious/spiritual beliefs	10%	22%
Wanting to follow a food trend	8%	7%

Difficulties with Vegetarian/Vegan Diet

Table 5 shows the most noteworthy of the 42 items inquired about in the survey, to help uncover what difficulties former vegetarians/vegans had with their diet and how these compare to the experiences of those who are still following the diet. Participants were asked to indicate their level of agreement for each—strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree—with N/A options for some items. The full table with can be found in the *Companion to the Initial Findings* report. This full table highlights that of the 42 items, former vegetarians/vegans reported greater difficulty than current vegetarians/vegans for all but six. Encouragingly, however, only three items (listed below) were selected by a majority of lapsed vegetarians/vegans as posing difficulty (agree/strongly agree).

The most noteworthy items showed that former vegetarians/vegans experienced greater difficulties than their “current” counterparts when it came to: cravings and boredom with food options; insufficient interaction with other vegetarians/vegans; not being actively involved in a vegetarian/vegan community; not seeing the diet as part of their identity; disliking that their diet made them “stick out from the crowd;” and feeling it was too difficult to be “pure” with their diet. A statistically significant association between items and whether an individual is a current or former vegetarian/vegan was found for 30 of the 42 topics tested, suggesting that the differences between these groups are multifaceted. Outside of questions to do with motivations (which were not asked of all participants), there was not a statistically significant association between the following items and whether an individual is a current or former vegetarian/vegan: relying on someone else to do the grocery shopping; taking too many vitamins/supplements; being on a low fat or raw diet; being frequently fatigued or light-headed; visiting a health care professional for diet-related issues; and having concerns about vegetarian/vegan nutrition for children and/or during pregnancy.

Table 5. Key Difficulties with Vegetarian/Vegan Diets

Category	Item	Former vegetarians/vegans (agree/strongly agree)	Current vegetarians/vegans (agree/strongly agree)
Social	I was not (am not) actively involved in a vegetarian/vegan group or organization (potluck, online community, etc.)	84%	71%
	I disliked (dislike) that my vegetarian/vegan diet made (makes) me stick out from the crowd	63%	41%
Other	I did not (do not) see vegetarianism/veganism as part of my identity	58%	11%
Social	I had (have) insufficient interaction with other vegetarians/vegans	49%	25%
Other	I began (have begun) to feel it is too difficult to be “pure” with my vegetarian/vegan diet	43%	11%
Taste	I was (am) bored with my food options	38%	12%
	I craved/was tempted (crave/am tempted) by poultry (chicken, turkey, etc.)	37%	9%
	I craved/was tempted (crave/am tempted) by beef or pork	35%	7%
	I craved/was tempted (crave/am tempted) by fish/seafood	33%	8%

Note: Some caution is needed in considering these results. It is possible that former vegetarians/vegans may have exaggerated their difficulties given that they provide a justification for their current behavior. In contrast, current vegetarians/vegans may have been more likely to minimize concerns as they are inconsistent with their present choices.

Animal Product Consumption

Former vegetarians and vegans were asked to indicate how frequently they consume animal products—dairy, eggs, chicken, beef, turkey, fish, pork, seafood, and other meats—using a 7-point scale: never, less than 1 time per month, 1–3 times per month, 1 time per week, 2–6 times per week, 1 time per day, and 2 or more times per day. As Chart 2 shows, with the exception of dairy, a majority of former vegetarians/vegans reported their consumption at once per week or less often. Without a reference point, it is not possible to know how these frequencies compare to omnivores in the U.S. as a whole. This may be something that we will explore in future releases. Likewise, while we know how often former vegetarians/vegans eat animal products, we do not know what their motivations are for any reduced consumption (taste, cost, availability, animal protection, etc.). In terms of land-based farmed animals, on average lapsed vegetarians/vegans are eating slightly more servings of chicken (0.3 servings daily) than of beef or pork (0.2 and 0.1 servings daily respectively). As noted, chicken consumption is especially problematic given that far more animals are needed to produce chicken meat than equivalent amounts of meat from cows or pigs.

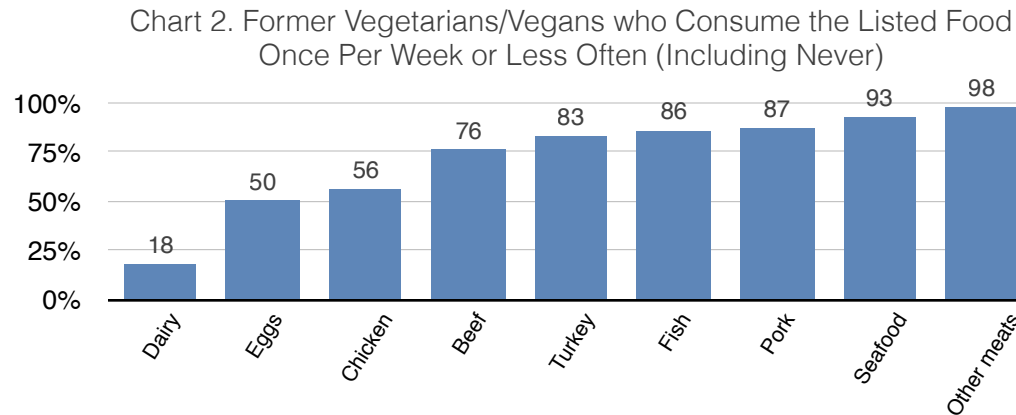
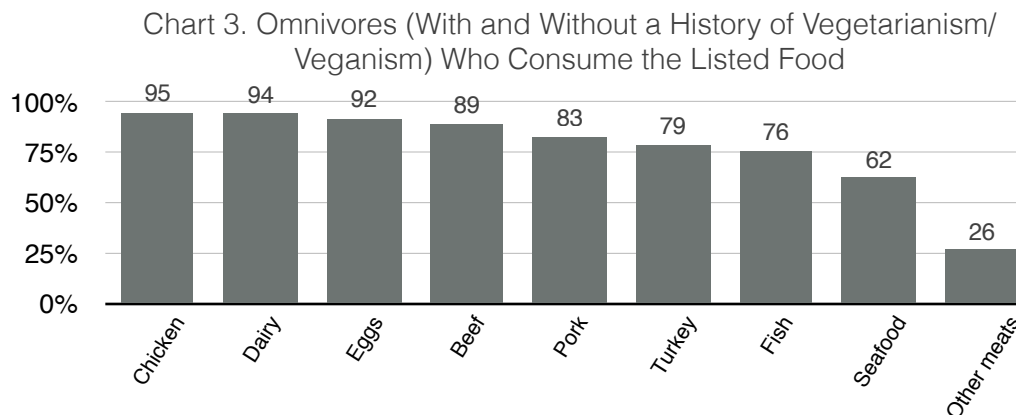


Chart 3 also speaks to the popularity of chicken. A greater proportion (95%) of U.S. omnivores (with and without a history of vegetarianism/veganism) consume chicken than any other type of meat.



Past Diet Change

Almost a third (30%) of former vegetarians/vegans had a lapse from vegetarianism/veganism prior to their present abandonment. This suggests it is not unusual for someone to go back and forth between an omnivorous and a vegetarian or vegan diet. While it appears many former vegetarians/vegans were interested enough in a meat-free diet to give it another try, by the same token, this means that there were difficulties (on more than one occasion) that were not surmountable.

Some current vegetarians/vegans also reported past lapses in their diet, though this was a smaller proportion (16%).

Because the groupings of current and former vegetarians/vegans reflect only a snapshot in time, as time moves on there will continue to be movement between the two groups. Some former vegetarians/vegans will give the diet another chance and some may have lifelong success from that point, while abandon the diet once more. At the same time, some current vegetarians/vegans may start opting for meat. Instead of admonishing people for such lapses, advocates should seek to minimize some of the more common difficulties that may be causing them and strive to be welcoming to those considering re-adoption.

Interest in Re-adoption

More than a third (37%) of former vegetarians/vegans indicated that they are interested in resuming a vegetarian/vegan diet. Of these individuals, more than half (59%) said they are likely or very likely to do so.

Chart 4 highlights the motivating factors in re-adoption for these lapsed vegetarians/vegans. It shows that health is the number one motivator for re-adopting the diet among those who expressed an interest. Health was also cited more than any other motivator by former vegetarians/vegans as the reason that motivated them to eat the diet.

While health could be what brings some lapsed vegetarians/vegans back, given the conflicting nature of health messaging, it may not be sufficient to sustain adherence. Indeed, as we have seen, current vegetarians/vegans reported a broader range of motivations for eating their diet compared to their lapsed counterparts.

