Motivations to Adopt Plant-Based Diets: Data from Adhering to Dietary Approaches for Personal Taste (ADAPT)

Akari Miki[1], Micaela C. Karlsen[2], Kara A. Livingston[2], Gail Rogers[2], Sara C. Folta[3], Alice H. Lichtenstein[2,3], Nicola M. McKeown[2,3]

[1]School of Arts and Sciences, Tufts University, Medford, MA; [2]Jean Mayer USDA Human Nutrition Research Center on Aging, Tufts University, Boston, MA; [3]Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA

Background

- The term "plant-based diet" broadly describes dietary patterns focusing on foods derived from plants (i.e., fruits, vegetables, legumes, whole grains, nuts, and seeds), but there is a spectrum of abstention from animal products.
- A pescatarian diet excludes meat but allows fish, and a vegetarian diet excludes both meat and fish. A vegan diet excludes meat, fish, and other animal products such as dairy products and honey. A whole food, plant-based (WFPB) diet is similar to a vegan diet, except it also excludes processed foods.
- There are many personal reasons as to why a person chooses to follow a plant-based diet, including to improve their health, promote animal welfare, and/or curb the environmental impact of meat production.[1] There is more to be learned about motivations for adopting a plant-based diet across the spectrum of abstention, as well as in comparison with animal-based diet followers.

Objectives

- To identify motivations to adopt plant-based diets using data from an online study that utilizes web-based recruitment and data capture methods.
- To examine differences in key motivations between those who adopt a plant-based diet (WFPB, vegan, vegetarian, or pescatarian) or animal-based diet.
- To identify differences in key motivations across three types of plant-based diet followers: WFPB, vegan, and vegetarian and pescatarian combined.

Methods

- Adhering to Dietary Approaches for Personal Taste (ADAPT) is an online survey that recruited followers of popular diets. The total sample size from the first round of recruitment (ADAPT Exam 1) is 2010 participants, of which 21.7% are male and 77.7% are female.
- The overall goal of ADAPT is to capture data on the psycho-biological, cultural, social, and environmental predictors of long-term adherence to diets.
- Recruitment and data collection are exclusively online (social media and online data capture via Qualtrics).
- Over the course of six weeks, 17 questionnaires are administered.
- For this analysis of Exam 1, 1227 participants reported following a WFPB, vegan, vegetarian or pescatarian diet, and they were categorized as plant-based diet followers. The rest of the sample were categorized as animal-based diet followers.

Recruitment Scheme

Summer 2015

ADAPT Feasibility Survey
N = 9,726
Completed and analyzed surveys

ADAPT Feasibility Survey
N = 8,462
Consented to receive future invitation to complete ADAPT

Jul 2017 – Jan 2018

ADAPT Exam 1
N = 2,010
Completed and analyzed surveys

Plant-Based Diet Followers
N = 1227
WFPB, vegan, vegetarian, pescatarian

Animal-Based Diet Followers
N = 783
Try to eat healthy, Paleo, Low-carb, Weston A. Price, etc.

Methods Continued

A multiple choice question with an "other" free-text option allows participants to indicate multiple reasons for adopting their diet. The subsequent follow-up question asks participants to rank their reasons for adopting their diet.

DEM3.34 Please select your reasons for eating the way you eat currently:

Please select ***all that apply.***

- Disease prevention or overall wellness
- To address a specific health problem or disease I have/had
- I like/enjoy eating the way I eat
- I want to help the environment
- I am concerned about animal welfare
- I am supporting a friend or family member with their diet
- I have read a book or watched a movie that influenced the way I eat
- Other _____
- Prefer not to answer

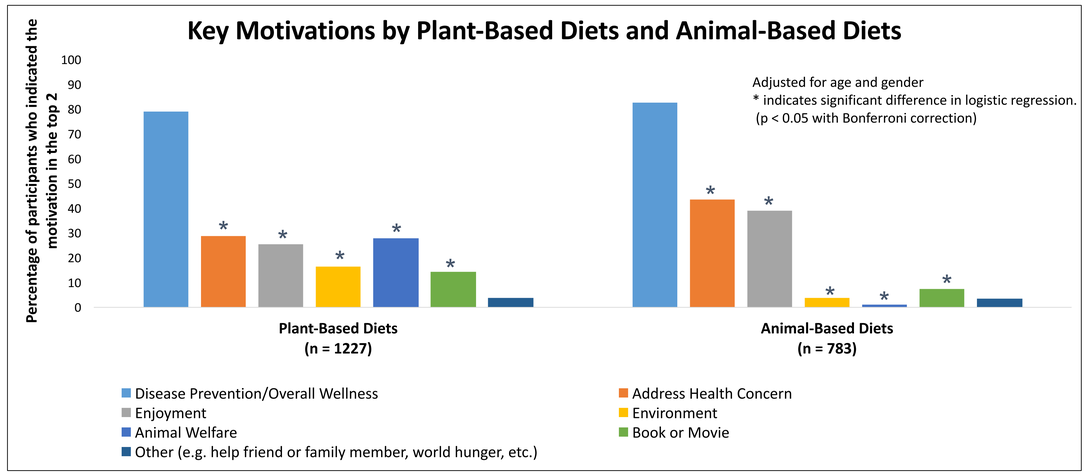
Follow-up Question: By dragging and dropping, from among your selected reasons for eating the way you eat currently, please rank them in the order of most important (first) to least important (last).

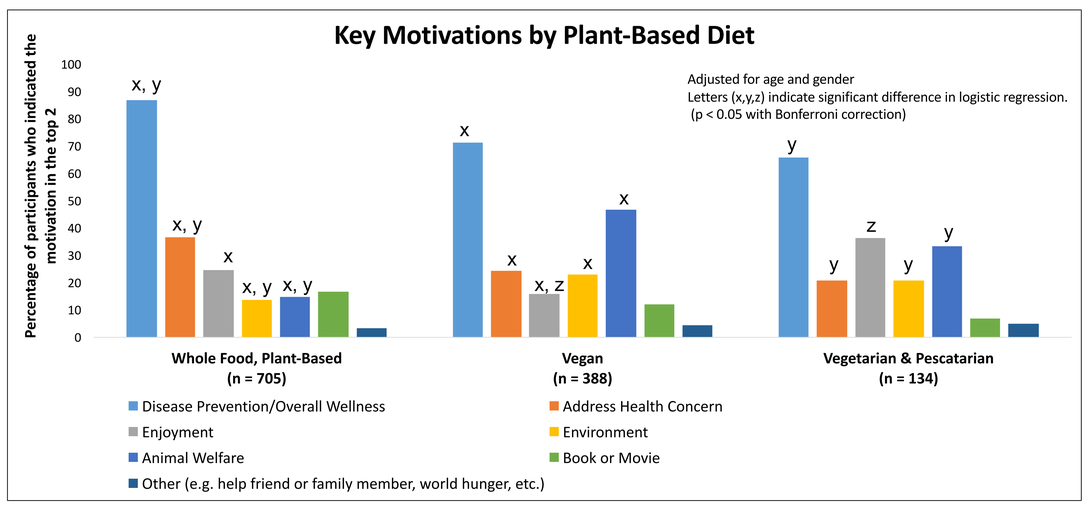
Results

Table 1. Demographic Characteristics of Participants

	Plant-Based Diets	Animal-Based Diets
Diet followers (n, % of 2010)	1227 (61.0)	783 (39.0)
Gender (n, % of dietary group)		
Male	265 (21.6)	172 (22.0)
Female	957 (78.0)	609 (77.8)
Prefer not to answer	5 (0.4)	2 (0.26)
$X^2 = 0.032$; p = 0.86		
Age group in years (n, % of dietary group)		
Mean, S.D.	52, 14.0	50, 13.6
18-44	377 (30.7)	281 (35.9)
45-64	616 (50.2)	390 (49.8)
65+	234 (19.1)	112 (14.3)
t = -2.92; p = 0.0036		
BMI in kg/m²		
Median	22.9	24.9
25th percentile	20.6	22.2
75th percentile	25.8	29.1
KSa = 4.42; p < 0.0001		

Results Continued





Conclusion

Compared to animal-based diet followers, plant-based diet followers exhibited more diversity in their key motivations for adopting their diet. While the majority of both animal- and plant-based diet followers endorsed disease prevention and overall wellness, some plant-based diet followers also endorsed addressing health concerns, and larger proportions of plant-based diet followers endorsed environmental concern, animal welfare, and influences of a book or movie.

A comparison of the data collected from the plant-based diet followers revealed subtle differences in the motivations among WFPB followers, vegans, and vegetarians and pescatarians. All three diet groups had a high proportion of participants who cited disease prevention as a key motivator. Yet, a greater proportion of WFPB followers identified disease prevention and health concerns as key motivators compared to vegans, vegetarians, and pescatarians. Alternatively, a greater proportion of vegans, vegetarians, and pescatarians endorsed environmental concerns and animal welfare compared to WFPB followers. Interestingly, the proportion of followers endorsing enjoyment was relatively small, particularly for vegans.

Overall, plant-based diet followers had a variety of motivations for adopting their diets. WFPB followers often emphasized health-related motivations, while vegans, vegetarians, and pescatarians tended to emphasize ethical motivations, such as environmental concern and animal welfare. Plant-based diets are a growing area of interest because they offer a healthier alternative to the typical Western diet, which is characterized by increased consumption of meat and processed foods. These findings could inform strategies to educate the public on the various benefits of plant-based diets.

Reference: 1. Ruby, Matthew B. "Vegetarianism. A Blossoming Field of Study." *Appetite*, vol. 58, no. 1, 2011, pp. 141–150.