

University Students' Knowledge and Attitudes of a Whole-Foods, Plant-Based Diet

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A Special Thank You To...

- **Dr. Anne VanBeber**, research advisor
- **Dr. Kelly Fisher**, research advisor
- **Dr. Lyn Dart**, research advisor

Purpose

To determine University students' general knowledge and attitudes of a whole-foods, plant-based diet

What is the Whole-Foods, Plant-Based Diet? (WFPB)

- **Whole-Foods, Plant-Based:** emphasis on eating fresh, non-processed foods, such as vegetables, fruits, whole grains, and nuts/seeds



Common Concerns vs. The Evidence

- Nutrients of concern
 - Iron¹
 - Calcium²
 - Protein³
- Reduces risk for chronic diseases⁴⁻⁶
 - Heart disease
 - Diabetes
 - Obesity
 - Cancer



Study Design

- 28-question cross-sectional survey using Survey Monkey®
- Inclusion criteria
 - 18+ years old
 - Currently attending college or university
 - Access to Internet
- Data analyzed with SPSS
 - Pearson correlation coefficients (r)
- Approved by TCU IRB

University Students' Knowledge and Attitudes of a Whole-Foods, Plant-Based Diet



Texas Christian University
Fort Worth, Texas

CONSENT TO PARTICIPATE IN RESEARCH

Title of Research: University Students' Knowledge and Attitudes of Whole-Foods, Plant-Based Diet

Funding Agency/Sponsor: None

Principal Investigator: Kelly Fisher DCN, RD, CSP, LD, Department of Nutritional Sciences

Co-investigators:

Alex Burgess, Junior – Coordinated Program in Dietetics Katherine Crider, Junior – Coordinated Program in Dietetics

You are invited to participate in a research study. In order to participate, you must be over the age of 18, currently enrolled in college or university level courses, and have access to the internet.

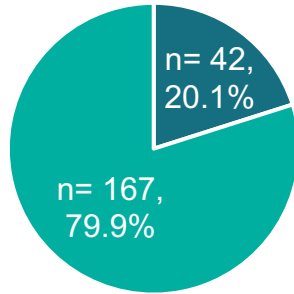
A summary of things you should know:

- This is a research study involving human subjects that has been approved by TCU Institutional Review Board.
- The purpose of the study is to determine University students' general knowledge and attitudes of a whole-foods, plant-based diet. If you choose to participate, you will be asked to complete one survey on Survey Monkey® which takes approximately 10 minutes.
- We don't believe there are any risks from participating in this research that are different for risk that you encounter in everyday life.
- There are no direct benefits for participants related to this study.
- Taking part in this research project is voluntary. You don't have to participate and you can stop at anytime.

Demographics of Respondents (n= 209)

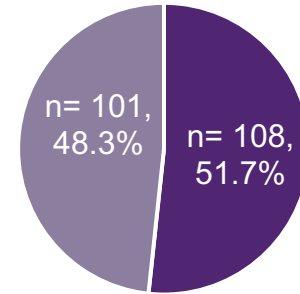
Sex

- Male
- Female



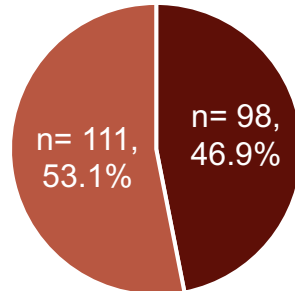
Category of Major

- Nutrition or Health Science Major
- Non-Health Science Major



Nutrition Course History

- Has Taken at Least 1 Nutrition Course
- Has Never Taken a Nutrition Course



Results

- ❖ Increased nutrition knowledge was associated with having an understanding of the WFPB diet.
- ❖ Increased nutrition knowledge was associated with more positive attitudes and beliefs toward the WFPB diet.
- ❖ Males were more likely to have negative attitudes and beliefs towards the WFPB diet.



Conclusions

- Increased nutrition knowledge was associated with positive beliefs and attitudes
- The WFPB diet is accessible to the university-aged population



Limitations and Suggestions for the Future

- Overlap between questions

* 17. A whole-foods, plant-based diet is beneficial to my health.

- ☐ Strongly agree
- ☐ Agree
- ☐ Neither agree nor disagree
- ☐ Disagree
- ☐ Strongly disagree

* 22. I see no benefit in following a whole-foods, plant-based diet.

- ☐ Strongly agree
- ☐ Agree
- ☐ Neither agree nor disagree
- ☐ Disagree
- ☐ Strongly disagree

- Convenience sample
- In the future: Randomized controlled trial with implementation of WFPB diet

Applications to the Real World

- Importance of nutrition education
- Supports the value of dietitians in the community
- Encouraging nutrition education for university students



References

1. Agarwal U. Rethinking red meat as a prevention strategy for iron deficiency. *ICAN: Infant, Child, & Adolescent Nutrition*. 2013;5(4):231-235. doi:10.1177/1941496413491285
2. Weaver CM, Proulx WR, Heaney R. Choices for achieving adequate dietary calcium with a vegetarian diet. *Am J Clin Nutr*. 1999;70(3):543s-548s. Accessed March 22, 2021. <https://doi.org/10.1093/ajcn/70.3.543s>
3. Sanders TAB. The nutritional adequacy of plant-based diets. *Proceedings of the Nutrition Society*. 1999;58(2):265-269. doi:10.1017/S0029665199000361
4. Kahleova H, Levin S, Barnard N. Cardio-metabolic benefits of plant-based diets. *Nutrients*. 2017;9(8):848-860. doi:10.3390/nu9080848
5. Barnard ND, Gloede L, Cohen J, et al. A low-fat vegan diet elicits greater macronutrient changes, but is comparable in adherence and acceptability, compared with a more conventional diabetes diet among individuals with type 2 diabetes. *J Am Diet Assoc*. 2009;109(2):263-272. doi:10.1016/j.jada.2008.10.049
6. Wright N, Wilson L, Smith M, Duncan B, McHugh P. The BROAD study: a randomized controlled trial using a whole food plant-based diet in the community for obesity, ischemic heart disease or diabetes. *Nutr Diabetes*. 2017;7(3). doi:10.1038/nutd.2017.3

Questions?



Summary

Known for its numerous health benefits, the whole-foods, plant-based (WFPB) diet is growing in popularity. In this study, researchers distributed a survey to assess the knowledge of, and attitudes towards, the WFPB diet among university students. Statistical analysis showed strong, positive correlations between students' nutrition knowledge and more positive attitudes towards the diet. The researchers concluded that the WFPB diet is accessible to university students, and dietitians may help improve the health of their community by educating university students on such a diet.