

# Is a plant-based diet related to diabetic markers in adults with diabetes?

Emma Collett, Margaret Ferrara, Nicholas Ferritto, Rianna Greene, Sofia Hernandez  
1<sup>ST</sup> DEPARTMENT OF HEALTH AND SPORT SCIENCE, UNIVERSITY OF DAYTON, OH

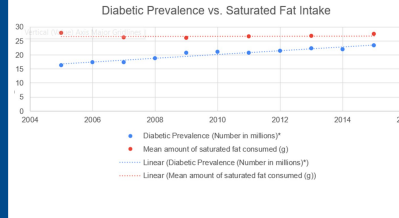
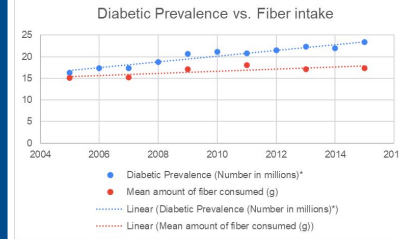
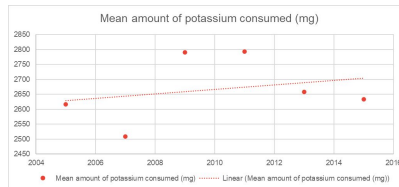
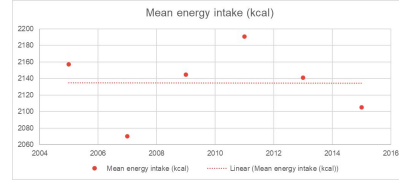
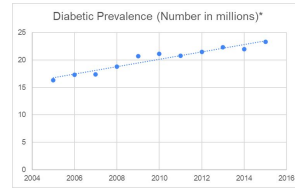
## INTRODUCTION

- 37.3 million people have diabetes in the US
- Common metabolic disorder defined by hyperglycemia
- Studies support a change in diet improves dysfunctions
- Purpose is to determine if there is a correlation between a plant based diet and improving diabetic conditions

## METHODS

- Secondary analysis
- CDC Division of Diabetes Translation for pre-existing diabetic prevalence
- National Health and Nutrition Examination Survey (NHANES) from the CDC
- Include men and women (>18 years old) in the U.S between 2005 to 2015
- Multiple correlational statistical analysis conducted

## RESULTS



## CONCLUSIONS

- Inconsistent results between diabetic prevalence and specific nutritional intakes
- Diet appears to have an effect on diabetes, however we did not look at enough data to determine what type of diet
- has an effect
- Some nutritional markers displayed correlation while others did not
- More research is needed in this area

## REFERENCES

1. Diabetes M. Z. Saeedi, A. S. & Nouri, S. (2020). Pathophysiology of diabetes: An overview. *Annals journal of medicine*, 15(4), 174-178. <https://doi.org/10.1016/j.ajm.2019.11.001>
2. Bullard, M., M. Cowie, S. C. Lussier, S. E., Soriano, S. H., Wiggins, A., Geiss, L. S., Chikara, T. J., Balle, D. B., & Imperatore, C. (2018). Prevalence of diagnosed diabetes in adults by duration type. *Diabetes Care*, 41(10), 1988-1994. <https://doi.org/10.2337/dca-2018-0242>
3. Centers for Disease Control and Prevention. (2021). *National Diabetes Statistics Report: Estimates and Trends in Diabetes and Prediabetes*. <https://www.cdc.gov/diabetes/data/statistics-reports/index.html>
4. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
5. National Health and Nutrition Examination Survey. (2015). *NHANES 2015-2016 National Health Statistics Reports, no. 125*. Bethesda, MD: National Center for Health Statistics, 2016.
6. *National Health and Nutrition Examination Survey*. (2015). *NHANES 2015-2016 National Health Statistics Reports, no. 125*. Bethesda, MD: National Center for Health Statistics, 2016.
7. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
8. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
9. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
10. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
11. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
12. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
13. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
14. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
15. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
16. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
17. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
18. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>
19. Givens, D. J., Lonsdale, M., Schwab, S., Karim, F. H., Brier, J., Galloway, R., & Forstner, P. H. (1994). Effect of consumption of glucose polymers and glucose fructose in human diabetes mellitus. *Diabetologia*, 37(10), 1085-1090. <https://doi.org/10.1007/BF00398212>