

Where's the Beet: A Correlation between Vegan diet and the Reduction of Type 2 Diabetes

Rachel Lubitz

Ramapo College of New Jersey, Mahwah, NJ, 07430



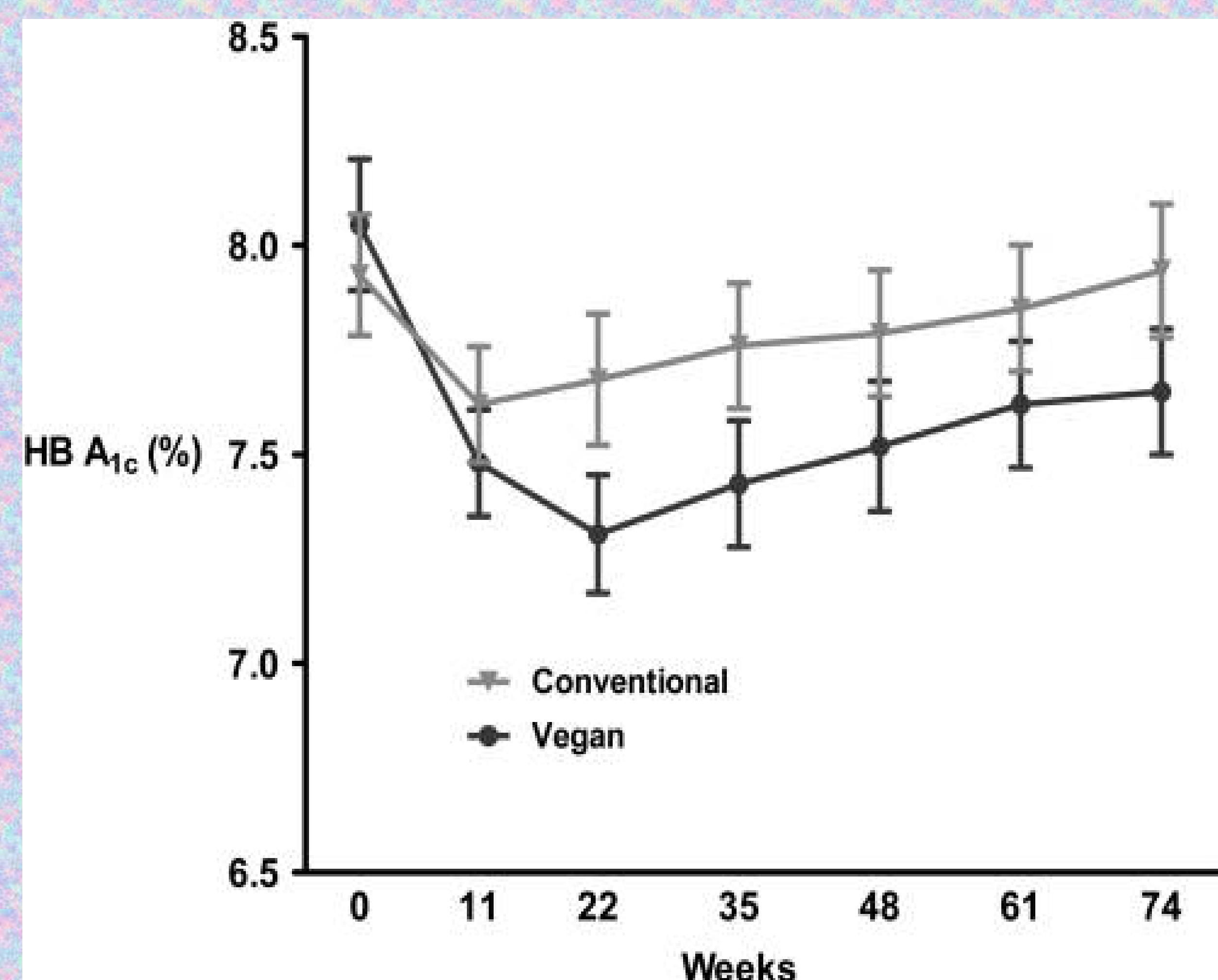
INTRODUCTION

- Diabetes Mellitus, also known as Type 2 Diabetes (T2D), is one of the major chronic as well as rapidly growing public health issues not only in the United States but throughout the world. The disease continues to represent itself as a more difficult health condition as news studies reveal the severity of the acute and chronic complications. The major factor in the prevalence of diabetes is poor diet, as suboptimal nutrition is a leading contributor to chronic disease and premature death in the United States and globally.
- While there is belief that a cure for T2D does not exist, various studies demonstrate that a vegan or plant-based diet is successful in managing complications of T2D through a reduction in Hemoglobin A1C (HbA1c), body mass index (BMI) and lipid index.



Literature Review

- An integrated literature review was used to analyze three different studies. Each study was about the relationship between diet and its effect on the body; however, each study had a different, narrower subtopic: BMI, HbA1c level and lipid index. Each study was an approved randomized controlled trial.



RESULTS

- The participants in the vegan diet group, after only 12 weeks, were able to drop almost a whole percentage in A1c levels, which is significant as typically, A1c levels are usually consistent. To conclude, based on the evidence and the outcomes, the vegan diet seemed to be more effective for glycemic control among T2D patients.
- Triglyceride levels were also 30% lower after four weeks on the vegan diet.

Vegan Diet Sample Menu

Plant power will get you through the day on the vegan diet plan.

Breakfast Menu
Banana nut scone
Scrambled tofu and kale
Mango yogurt smoothie

Lunch Menu
Veggie sandwich
Sweet potato fries
Quinoa salad (1 cup)

Dinner Menu
Black beans with rice
One half baked potato

Conclusions

- The current approaches to combating this chronic disease epidemic are clearly not working and the trend of an increase in these chronic diseases will continue if the proper and most effective interventions are not emphasized and implemented. Chronic diseases, like T2D do not have to be the fate for Americans. The multiple peer-reviewed studies show that a low-fat plant-based, vegan diet is shown to be powerful and effective in controlling and even reversing multiple chronic diseases. The health of those following a vegan diet has been shown to be significantly enhanced than those who incorporate meat and animal-based products into their diet. The proof is in the plants; the studies show that society can not only survive on a purely vegan, plant-based diet, but also that we can thrive.

RECOMMENDATIONS FOR PRACTICE

- Prevention and education on positive lifestyle behaviors must begin at an early age to ensure positive health outcomes.
- While the health care provider may recommend medications or surgery to manage the complications of the disease, he/she should also recommend dietary and lifestyle changes, specifically a plant based diet.



Acknowledgements

Dr. Andrea Centrella-Nigro DNP, RN, CNE
 Dr. Maisha Amen RN, PhD
 Dr. Ashwani Vasishth, PhD
 Dr. Rebecca Root
 Chris Brittain

REFERENCES

- De Natale, C., Annuzzi, G., Bozzetto, L., Mazzarella, R., Costabile, G., Ciano, O., & ... Rivellesse, A. A. (2009). Effects of a Plant-Based High-Carbohydrate/High-Fiber Diet Versus High-Monounsaturated Fat/Low-Carbohydrate Diet on Postprandial Lipids in Type 2 Diabetic Patients. *Diabetes Care*, 32(12), 2168-2173. doi:10.2337/dc09-0266
- Ajala, Olubukola., English, Patrick., Pinkney Jonathan. Systematic review and meta-analysis of different dietary approaches to the management of type 2 diabetes. *The American Journal of Clinical Nutrition*, Volume 97, Issue 3, 1 March 2013, Pages 505-516. <https://doi.org/10.3945/ajcn.112.042457>
- Kahleova, H., Levin, S., & Barnard, N. (2017). Cardio-Metabolic Benefits of Plant-Based Diets. *Nutrients*, 9(8), 848. <http://doi.org/10.3390/nu9080848>
- Graca, J., Catheiros, M.M., & Oliveira, A. (2015). Attached to meat? (Un)Willingness and Intentions to adopt a More Plant-based Diet. *Appetite*, 95113-125. doi.10.1016/j.appet.2015.06.024