

Dietary Patterns and Cardiac Risk in Young Adults: A Cross-Sectional Study

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INTRODUCTION

The American Heart Association and NIH report 697,000 people die of cardiovascular disease in the United States every year. This cross-sectional study was created to assess dietary habits and their association with risks of developing cardiac disease in University of Dayton students ages 18-25. Through the use of the Rapid Eating Assessment for Patients (REAP) questionnaire created by Brown University, researchers study dietary patterns that have a higher risk associated with developing cardiovascular disease.

METHODS

Purpose: Explore how diet can affect the risk of developing cardiac disease in young adults specifically ages 18-25.

Study Design: A cross-sectional approach using a virtual survey method.

Participants: 18-25 year old students from the University of Dayton.

Protocol: Participants self-report about their dietary habits and any diagnosis of heart disease or cardiac disease risk factors through the REAP questionnaire.

Instruments/Measurements: REAP questionnaire uses a likert scale to measure dietary habits and an additional section relating to CVD risk was used.

RESULTS

A total of 44 participants were recruited by email. 38 participants were female (86.4%) and 6 were male (13.6%), ranging in age from 18-22 years old (mean 21.5, SD=2.45). (Figure 1). When asked if a healthcare provider has diagnosed participants with any of the following at the age of 18 or older, there were 2 participants (4.5%) that reported being diagnosed with high blood pressure, 1 participant (2.3%) reported being diagnosed with high low-density lipid (LDL) cholesterol, and 1 participant (2.3%) reported being diagnosed with obesity. The other 40 participants (90.9%) reported that they had not been diagnosed with any CVD risk factors. (Figure 2)

When asked if a participant has been diagnosed with cardiac disease at the age of 18 years or older by a healthcare provider, 1 participant (2.3%) said yes, while the other 43 participants (97.7%) said no. However, it should be noted that the one participant that reported yes to being diagnosed with cardiac disease reported incorrectly. To maintain anonymity, this participant's response was excluded for this question only.* This means that 100% of the participants have not been diagnosed with cardiac disease by a healthcare provider.

Figure 1
Reported Percentage of Participants with Diagnosed Cardiac Disease Risk Factors

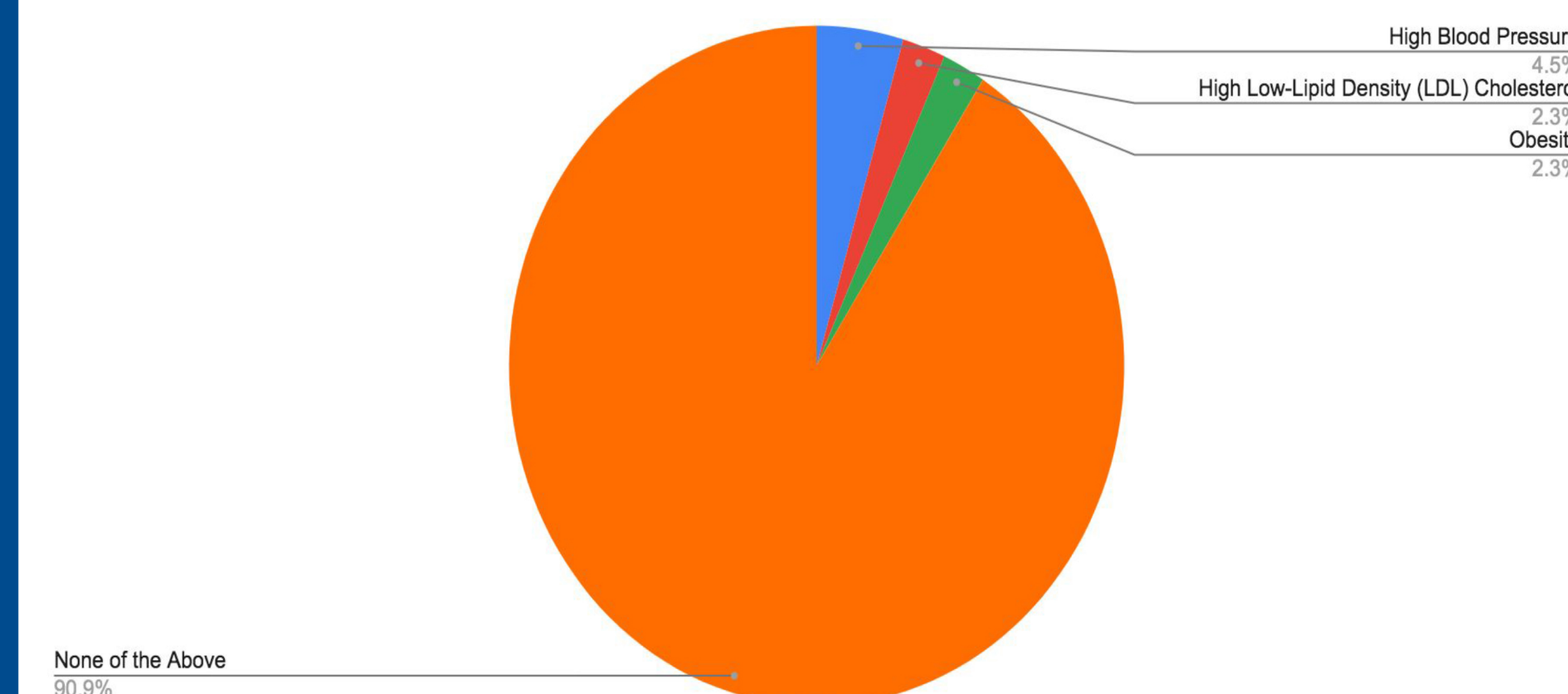


Table 2
P-Value for Response Mean Values to Cardiac Disease Risk Mean

| Responses | Response Mean Values | Cardiac Disease Risk Mean Value |
|----------------------|----------------------|---------------------------------|
| Usually/Often | 7 | 8.8 |
| Sometimes | 19.14 | 8.8 |
| Rarely/Never | 17.29 | 8.8 |
| Never/Not Applicable | 2 | 8.8 |
| p-value | 0.5775108964 | |

CONCLUSIONS

In conclusion, the results were inconclusive in giving insight to how diet can affect the risk of cardiac disease in young adults specifically ages 18-25. The results we saw did not show that these participants' diets have affected their risk for cardiac disease at their current age. We believe that since the participants are so young, their diet as a young adult may have an effect on their risk for cardiac disease later in life but do not have a direct effect on their cardiac health as of now.

REFERENCES

- (n.d.). Rapid Eating Assessment for Patients (REAP). <https://www.brown.edu/academics/public-health/chphe/sites/public-health-cher/files/Reap7.pdf>
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