

Introduction

Background

- Health-related quality of life (HRQOL) describes one's overall perception of well-being.¹
- HRQOL goes beyond direct measurement of population health and assesses the impact of health status on quality of life.¹
- Many college students rate their own HRQOL as inadequate, reporting many days out of the month experiencing anxiety, low energy, and high levels of perceived stress.²
- This population also suffers from poor overall diet quality, contributing to an increased risk for diet-related chronic disease.³
- Fruit and vegetable intake has been reported as an influence of HRQOL within college students,² but the role of total diet quality has not yet been assessed.

Objective:

- **To assess the influence of diet quality on HRQOL among college students.**

Methods

Study Design

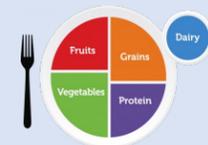
- Cross-sectional

Participant Recruitment

- Convenience sampling
- Students from a Northeastern university were invited to participate in an online health survey. Emails were obtained through the university's listserv.
- Students who completed the survey were entered a raffle for a \$25 giftcard.

Outcomes Measured

Total Diet Quality



- Independent variable
- USDA's short Healthy Eating Index (sHEI)
- Scores range from 0-100
- Higher scores indicate greater adherence to the Dietary Guidelines for Americans 2020-2025

HRQOL



- Dependent variable
- CDC's Healthy Days Core Module
- Questions are formatted, "how many days per month do you feel..".

Statistical Analysis

- Descriptive analysis
- A multivariate analysis of variance (MANOVA) assessed group differences in HRQOL between students who scored above average sHEI and students who scored the average sHEI and below.

Results

College Students' (N=753) Demographics	M (SD) or % (n)
Average Age	20.9 (2.3)
Gender	
Male	30.2% (197)
Female	69.8% (526)
Other	<1% (26)
Ethnicity	
White	87.7% (660)
Hispanic or Latino	3.3% (25)
Black	1.1% (8)
Native American or Asian/Pacific Islander	4.1% (31)
Other	2.6% (20)
Grade level	
Freshman	20.1% (151)
Sophomore	22.2% (167)
Junior	21.0% (158)
Senior	19.2% (145)
Graduate	17.0% (128)

Students who **had above average diet quality** reported significantly **more** days per month feeling **healthy and full of energy** and **less** days per month with **poor mental health** compared to students who scored average and below.

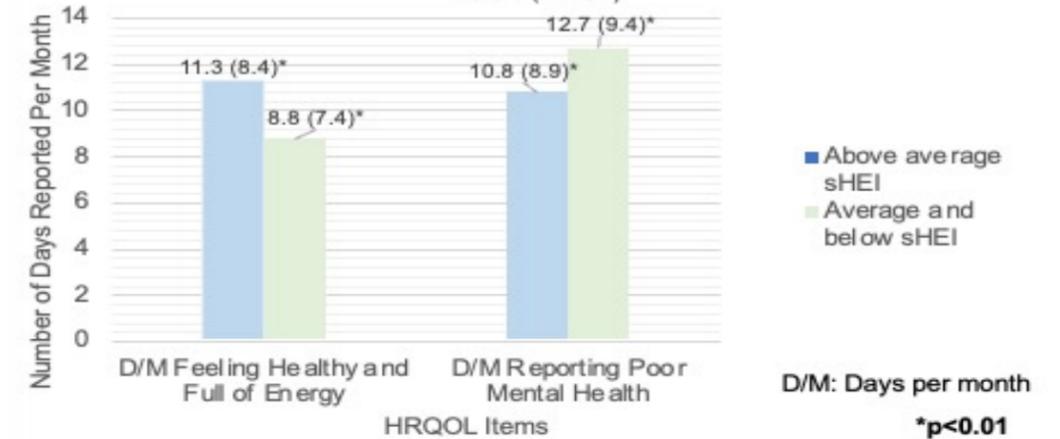
College Students' (N=753) Average Health-Related Quality of Life and Diet Quality

Would you say your health is...	% (n)
Excellent	5.8 (44)
Very good/excellent	30.9 (233)
Good	45.4 (342)
Fair	16.2 (122)
Poor	1.8 (14)
How many days per month was/did...	Average (± SD)
Your physical health was not good?	4.05 (6.3)
Your mental health was not good?	11.7 (9.2)
You felt healthy and full of energy?	10.0 (8.2)
sHEI* Total Score	49.3 (10.2)

*Short Healthy Eating Index Score

Results

Comparison of Health-Related Quality of Life (HRQOL) Between Students that Reported Above Average short-Healthy Eating Index (sHEI) Scores (n=386) and Students with Average sHEI Scores and Below (n=367)



Key Results

- There was a significant difference in HRQOL between those who had above average sHEI and those who scored the average and below ($F(3,711) = 6.19, P < 0.001$, Wilk's $\Lambda = .98$, partial $\eta^2 = .025$).
- Students who had above average sHEI scores reported significantly **more** days per month feeling healthy and full of energy (11.27 ± 8.41 vs 8.78 ± 7.4) compared to their peers ($P < .001$).
- Students who had above average sHEI scores also reported significantly **less** days per month with poor mental health (10.78 ± 8.91 vs 12.69 ± 9.37) compared to students who scored average sHEI scores and below ($P = .005$).
- Total diet quality was not a significant predictor of days per month with poor physical health.

Conclusion

- Total diet quality, as measured by the sHEI, significantly influenced college students' HRQOL.
- These findings provide justification for wellness-aimed interventions that address college-specific barriers of diet quality in order to improve HRQOL.

References

1. Office of Disease Prevention and Health Promotion. (n.d). Health-Related Quality of Life & Well-Being. Healthy People 2030. U.S Department of Health and Human Services. Accessed at <https://www.healthypeople.gov/2020/topics-objectives/topic/health-related-quality-of-life-well-being>.
2. Parsons, K. "The Impact of Diet Quality on Health-related Quality of Life in College Students" (2021). Electronic Theses and Dissertations. 3532.
3. Williams, R. A., Rose, A. M., Bruno, R, et al. (2019). Examination of the relationship of diet quality with cardiometabolic risk factors in apparently healthy college students. Journal of Education and Health Promotion, 8(1), 148-148.