

Combating the Obesity Epidemic: Eating Habits in College Students

02/07/2024

Written by: Gabriella Thomas - Undergraduate in Exercise Physiology

Mentor: Toni Uhrich

Edited by: Mike Haischer

Key Points:

- Rates of overweightness and obesity in the United States have drastically increased with over 40% of America's adult population classifying as obese.
- Many college students experience a rapid weight gain of 5-10 pounds their first year.
- To combat the issue of college weight gain, universities must acknowledge their impact on student dietary choices and alter dining hall choices accordingly.

In recent years, obesity has reached record levels and presents a major public health threat. One in three people in the United States are obese, and the bodyweight of an average American adult is increasing at a rate of 0.9 kg (about 2 lbs) per year¹. Possible health concerns resulting from obesity include stroke, sleep apnea, coronary heart disease, hypertension, type 2 diabetes, and dyslipidemia, among others (Figure 1). As depicted, relative to the reference category of 22.5 to <25 kg/m², the hazard ratio (HR) for all-cause mortality rose sharply with increasing BMI.

University is shown to be a critical period for young adults regarding food choices and their relationship with weight. Studies have shown that college students tend to gain more weight than those who do not attend university³. Young adults who attend college have been shown on average to gain between 1.8 kg (4.0 lb) and 4.1 kg (9.0 lb)². The college transition for many young adults triggers lifestyle changes that can promote the onset of obesity. When combined with personal and environmental barriers (Table 1), these lifestyle modifications increase obesity risk. Environmental barriers include college dining hall options and their relationship to unhealthy food purchases.

An observational study at Cornell University concluded that students feel dining halls strongly influence

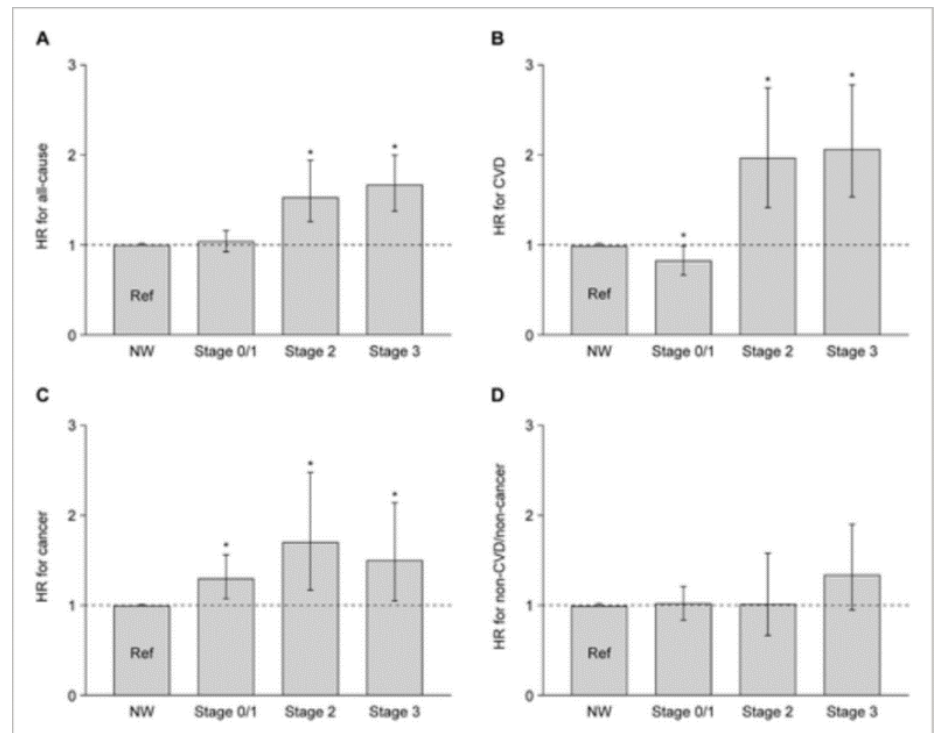


Figure 1: Association between obesity stage and hazard ratio (HR) of all-cause (A), CVD (B), cancer (C), and non-CVD or noncancer mortality (D)¹.

Combatting the Obesity Epidemic: Eating Habits in College Students

their eating habits³. Students mentioned they began to eat irregularly when beginning school, such as opting for cookies or ice cream if meal options did not appeal to them. Students also commented on the “all-you-can-eat” layout provided by many dining halls and contributed this unrestricted freedom to their weight gain. Colleges should acknowledge their role in guiding healthy eating behaviors and create a healthy environment for the students. A study at South Dakota State University found that in the fall 2014 and spring 2015 semesters, 85% of the food offered in dining halls was considered unhealthful². In the fall and spring, over 90% of the food chosen by students in dining halls was the unhealthful option. Nutrition professionals within universities should design programs to help students to be more motivated to choose healthy food. Cornell has also studied food purchases at the high school level and determined that a lunchroom that makes healthier options more convenient increases the purchase of healthier options, and therefore should be applied to college-aged individuals³. Overall, university environment can have both a positive and negative influence on eating habits. If universities are driven to promote healthier habits, students will be more conscious of their dietary and overall lifestyle decisions.

BARRIERS	ENABLERS
<p>Individual-level</p> <ul style="list-style-type: none"> Not exercising Not eating healthful food Time constraints Unhealthy snacking Convenience food Bad mood & stress High prices Junk food home availability 	<p>Individual-level</p> <ul style="list-style-type: none"> Maintenance of healthy lifestyle Healthy eating habits Food knowledge and education Meal planning Involvement in food preparation Physical activity Being portion-aware
<p>Social-level</p> <ul style="list-style-type: none"> Parental food behavior and influence Friends pressure and influence Low food culture 	<p>Social-level</p> <ul style="list-style-type: none"> Friends pressure and influence Parental food behavior and influence
<p>University Environment</p> <ul style="list-style-type: none"> College's dining services Availability of high-calorie food and fast food 	<p>Environmental-level</p> <ul style="list-style-type: none"> College's dining services

Table 1: Barriers and enablers for student dietary choices³

References

1. Fruh, S. M. (2017). Obesity. *Journal of the American Association of Nurse Practitioners*, doi:10.1002/2327-6924.12510
2. Leischner, K., McCormack, L., Britt, B., Heiberger, G., & Kattelman, K. (2018). The healthfulness of entrées and students' purchases in a university campus dining environment. *Healthcare*, 6(2), 28. doi:10.3390/healthcare6020028
3. Sogari, G., Velez-Argumedo, C., Gómez, M., & Mora, C. (2018). College students and eating habits: A study using an ecological model for healthy behavior. *Nutrients*, 10(12), doi: 10.3390/nu10121823