

Reviewer's report

Title: Change in diet, physical activity, and body weight among young-adults during the transition from high school to college.

Version: 1 **Date:** 17 February 2009

Reviewer: Sherrie Delinsky

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Change in diet, physical activity, and body weight among young-adults during the transition from high school to college.

This longitudinal observational study evaluated change in weight, dietary intake, and other health related behaviors among first-year college students. This is an important area of research given the public health significance of overweight and obesity, especially in adolescents and young adults, and efforts to understand critical periods for risk may have implications for potential interventions.

Strengths of the study:

- (1) the methodology included actual weighing and measuring of all participants
- (2) a very high response rate for the follow-up assessment (85%)
- (3) inclusion in the assessment of numerous variables including dietary intake, physical activity, health behaviors, and approximations of parents' weight status
- (4) the manuscript is well-written and clear

Limitations of the study:

- (1) Participants with a BMI at or above 25 were more likely to drop out, suggesting bias in the sample
- (2) No information on ethnicity or other demographics is included; a comparison across ethnic groups on weight status or weight change would be particularly useful
- (3) The FFQ assesses frequency of foods consumed without attention to serving size

Suggested revisions (Major Compulsory MC, Minor Essential ME or Discretionary D):

- (1) In the abstract conclusions, change "Some but not all . ." to "almost one quarter of students" to be more precise (D)
- (2) Please elaborate in the background section about which unhealthy behaviors were hypothesized to contribute to weight gain during the transition to college (especially those that are included in the discussion section) (ME)
- (3) Please include in the methods section a description of how the study was pitched to potential participants (e.g., was it called the "Freshman Health

Study")? This information is relevant in trying to ascertain who might have been interested/not interested in participating. Along those lines, was a response rate (% of potential participants approached who agreed to participate) recorded? (ME)

(4) Please include in the methods section the range of time periods that the FFQ covers (ME)

(5) Wording of the first paragraph under "Assessment of exposure variables" on page 5 needs to be modified (ME)

(6) On page 5 change " Standard Reference but also include nutrient content info . ." to "includes" (ME)

(7) On top of page 6, please note if question about whether participants participated in more, same, or less PA than last 6 months of high school was assessed at Time 2 only (D)

(8) In the statistical analysis section, please include an explanation of why ANOVAs were used instead of t-tests to compare means for 2 unrelated groups (ME)

(9) Is any information available about demographics of the sample, particularly ethnicity? If possible, please compare ethnic groups on BMI and weight change, as the literature suggests important differences in weight status and risk of overweight/obesity across ethnic groups (MC)

(10) In the results section, please add the % of the sample that showed no change in weight, to make it explicit the portion of the sample whose weight stayed stable (MC)

(11) On page 9 of the discussion section, what timeframe is being referenced regarding the eating an average of 2.1 more meals in on campus dining facilities? (ME)

(12) On page 10 (first sentence), please change "this difference is questionable" to "marginal." (D)

(13) One of the few findings that differentiated those who gained significant weight to those who did not was the frequency of breakfast consumption. This finding is surprising given the consistent literature that regular breakfast consumption is a healthy behavior that helps people lose weight and maintain weight loss. How do the authors explain this study's finding with regards to this literature? Please include in the background and/or discussion (MC)

(14) Please clarify in the discussion section, you speculate that weight gain may return to baseline levels in later years of college . . .does this mean that the weight gain does not continue each year or that students lose weight so they return to their original weight from the start of college? (ME)

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests