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Drinking, Nutrition, and Mood Assessment

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The Effect of Heavy Episodic Drinking on Caloric Intake

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HWS 410 CURE

Abstract

- Alcohol use is known to be prevalent in/on college campuses, where students are prone to heavy episodic drinking
- We studied the correlation between alcohol use in university students and how it impacts their diet.
- Does heavy episodic consumption of alcohol impact caloric intake in college students?
- Students filled out a short survey on their habits
- We found that there was a correlation between Heavy Episodic drinking, caloric intake, and restrictive eating.
- We found no significant relationship between heavy episodic drinking and conscious monitoring of eating habits

Introduction

- From 2012-2021, data collected using 4,519 college students showed there were high rates of binge drinking reported along side of moderate rating of poor quality diets (Krieger et al., 2018).
- Of 4,271 undergraduate college students surveyed from 10 universities, 39% reported restricting calories on drinking days, 67% of which did so because of weight concerns (Giles et al., 2009)
- Another study found that average excessive alcohol consumption and binge drinking were associated with nonadherence to the main food guidelines on consumption of meat, milk, fruits, and vegetables, and were more likely to skip breakfast and dinner (Valencia-Martín et al., 2011)
- Given the prevalence of alcohol use (HED) in college students, it is important to explore the potential health risks associated with excessive alcohol consumption namely poor nutrition, weight gain, and chronic diseases.
- We expect our findings to follow a positive relationship between Heavy Episodic drinking and some change in caloric intake

Methods/Results

Demographics:	Male and Female; 18-22 years of age.
Number of Participants:	128
Survey:	Drinking Nutrition and Mood Assessment https://forms.gle/B7quLHskcsCvXNGu5
Deliverance:	GroupMe, text messages, word of mouth, and in person
Statistical Analysis:	Pearson's Correlation Coefficient, SPSS Version 25.0

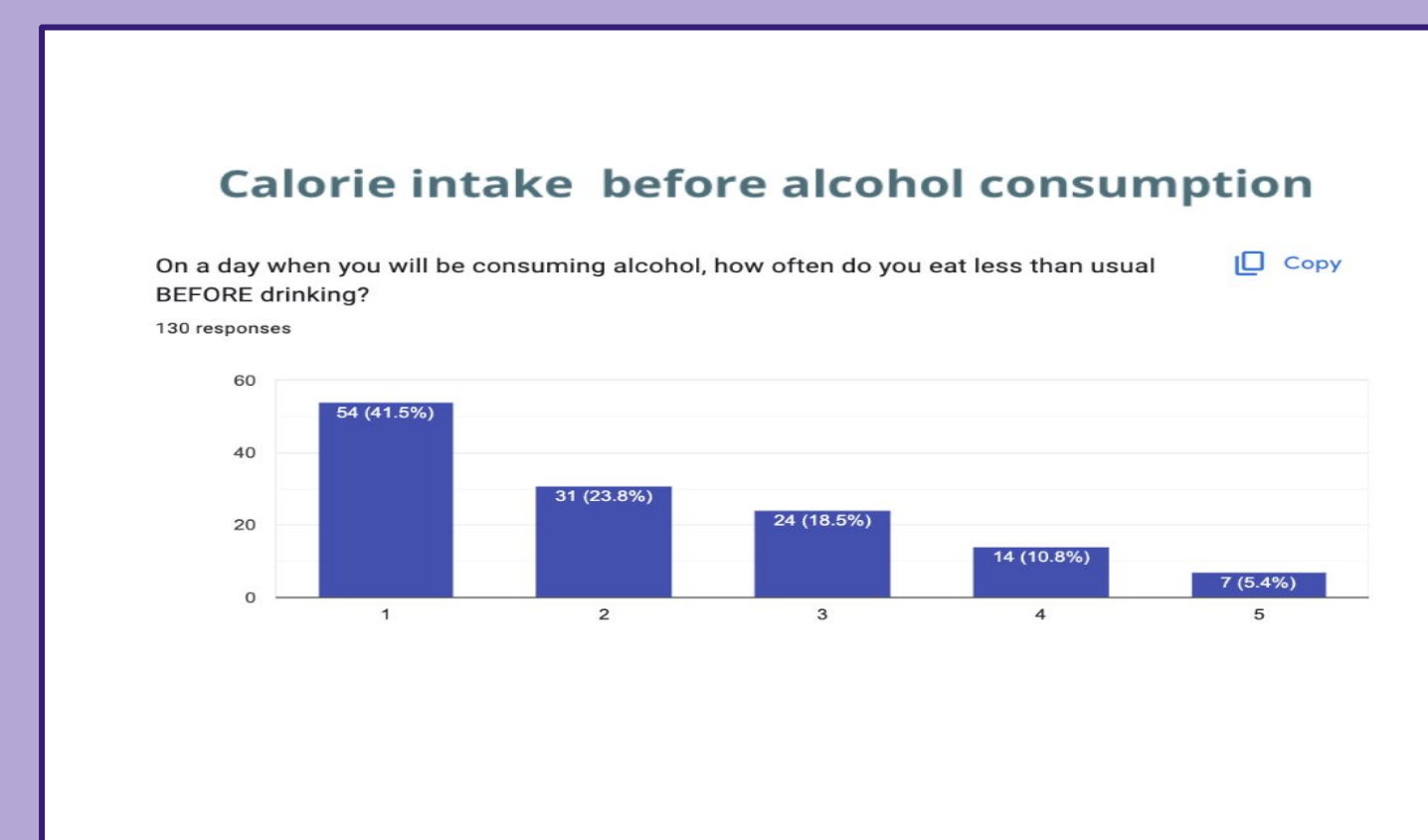


Figure 1: Calorie intake before alcohol consumption

- The results show that most participants (41.5%) reported they did not often eat less than usual before drinking. Only 5.4% reported they did eat less before drinking more often than not.

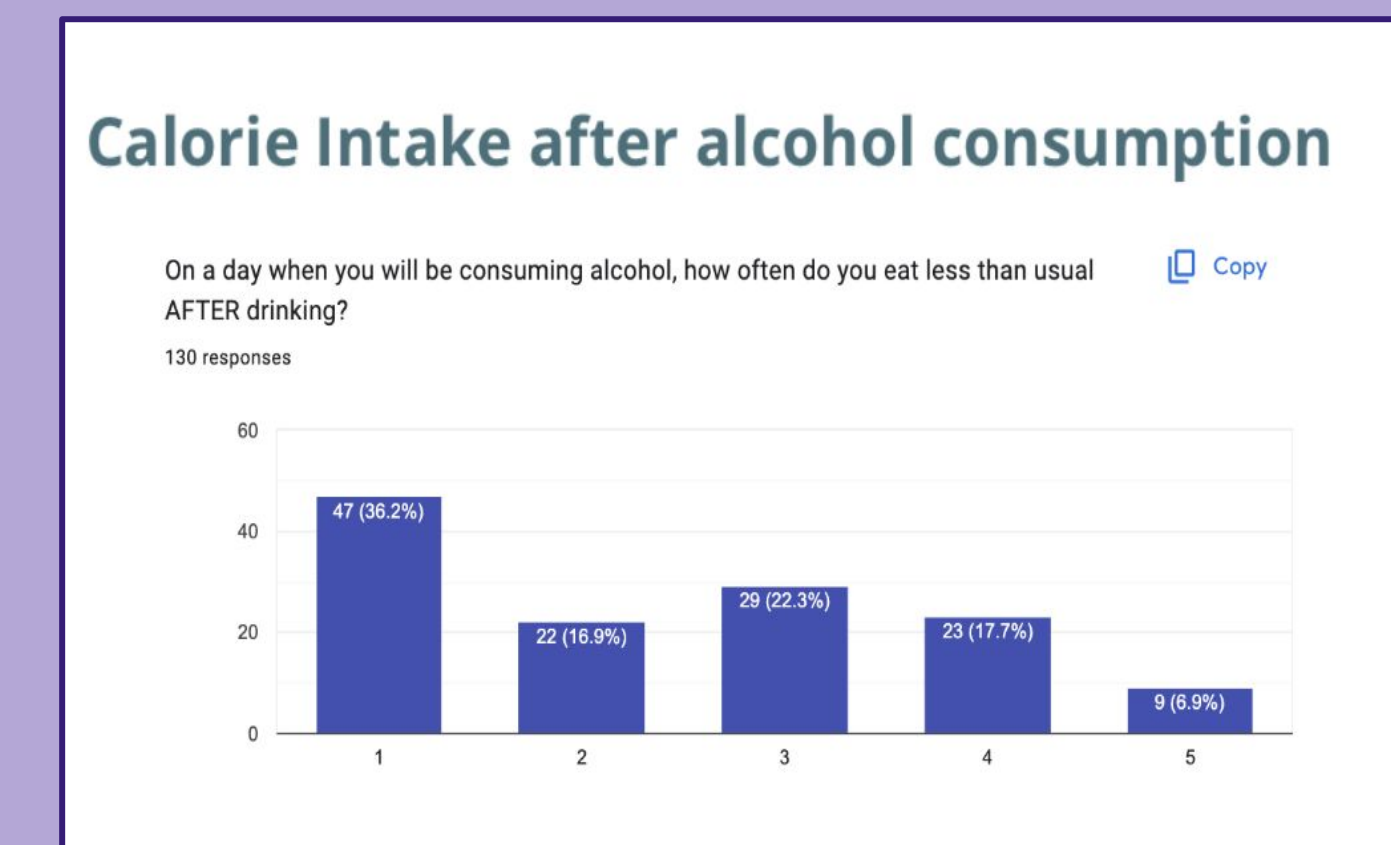


Figure 3: Calorie intake after alcohol consumption

- the results on this graph show that a majority (36.2%) of participants reported not eating less than usual after drinking. The weakest percentage of participants (6.9%) reported they ate less than usual after drinking

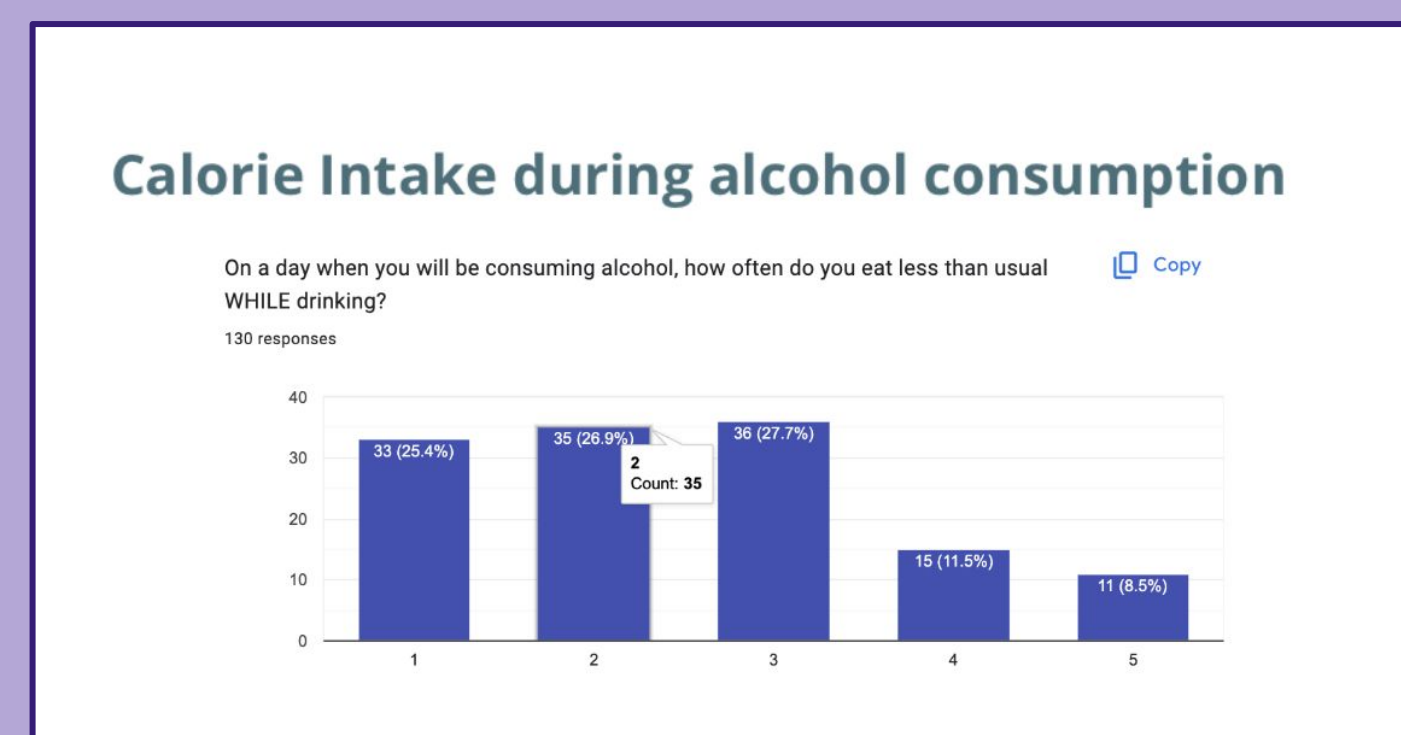


Figure 2: Calorie intake during alcohol consumption

- The results on this graph showed a fairly even split amongst individual who reported not eating less than usual while drinking. Only 11.5% and 8.5% of participants reported they comply ate less while drinking

Eating <i>while</i> and <i>after</i> drinking	Correlation between eating less than usual while drinking and after drinking 0.439**
Eating <i>before</i> and <i>after</i> drinking	Correlation between participants eating less than usual before drinking and while drinking 0.333**
Consuming Alcohol and Monitoring Eating Habits	Correlation between consumption of alcohol and consciously monitoring eating habits before drinking 0.079 (NOT SIGNIFICANT)

Table 1. Points of Significance/Correlations between Eating and Alcohol Consumption(** = p<0.01)

Heavy Episodic Drinking and Increasing Calories	Correlation between Heavy Episodic drinking and increasing caloric intake before drinking 0.201**
Heavy Episodic Drinking and Decreasing calories	Correlation between Heavy Episodic Drinking and decreasing caloric intake while drinking 0.182**
Heavy Episodic Drinking and Decreasing calories	Correlation between Heavy Episodic Drinking and decreasing caloric intake after drinking 0.081 (NOT SIGNIFICANT)

Table 2. Points of Significance/Correlations between Heavy Episodic Drinking and Change in Caloric Intake(** = p<0.01)

Discussion

- Our findings include:**
 - A relationship between alcohol consumption and a change in calories before, while and after drinking
 - A relationship between Heavy Episodic drinking and increased caloric intake
 - A relationship between Heavy Episodic drinking and Decreasing Calories
- So What?**
 - Our findings with Heavy Episodic drinking and Increasing calories may be consistent with studies that show an increase in hunger while drinking once they begin eating during an HED.
 - This concept seems to suggest that when eating and drinking are performed together, alcohol tends to promote eating excessively (McVean, 2020).
 - Our findings with Heavy Episodic Drinking and Decreasing Calories may be consistent with studies showing the myth that restricting calories is an effective weight loss strategy specifically in women (Giles et al., 2009).
 - Misconception that reduction of overall caloric intake for the day could lead to weight loss and incentivize participants to continue eating less while and after drinking.

It is important to note that with our cohort of participants, and self-report survey type our results may not be fully indicative of the effects of heavy alcohol consumption on caloric intake.

it is impossible to assume a causal relationship between the two

Conclusion

- In conclusion
 - Participants may be experiencing diet changes due to alcohol consumption.
 - Participants who engage in Heavy Episodic Drinking are likely to have a change in their usual caloric intake.
- Further Research may be interested in exploring the relationship between gender with alcohol and eating habits to better understand the overall effect of excessive alcohol consumption on each individual.

References

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