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Objectives

- To investigate the associations between **Night-time Snacking** habits and **Sleep Patterns** among UCSD college **Students**.
- To contribute to the understanding of how dietary behaviors influence sleep health, with the goal of informing interventions.

Background

- College life often prompts irregular schedules, academic pressures, and late-night social activities, fostering a culture of late-night snacking.¹
- Consuming food close to bedtime disrupts sleep quality and duration.²
- There is a well-established link between sleep deprivation and adverse health outcomes among college students.^{3,4,5,6,7}
- Existing research has explored the relationship between late-night snacking and sleep.

However, there is still a gap in research concerning how factors such as snack quantity, frequency, and types are associated with sleep.

Methods

- A cross-sectional study was conducted through an online anonymous survey that targeted UCSD students (N=116).
- The **Qualtrics survey** was distributed through emails, class discussions, and social media platforms including Discord and Instagram in a span of 1 month period.
- Chi-square, Anova, and Pearson's correlation tests were conducted to assess possible association between:
 - Exposure (Categories and Quantities of **Pre-Bed Snacks**)
 - Outcome (**Sleep Disturbances** in Quantity and Quality)

There are Significant Associations between Salty Snacks, Sweet Snacks, and Quick Meals With Sleep Issues, as well as Portion Sizing with Sleep Quality, which Highlights a Potential Link between Sleep and Snacking Habits.

Results

Figure 1: Frequency of Late-Night Snacks

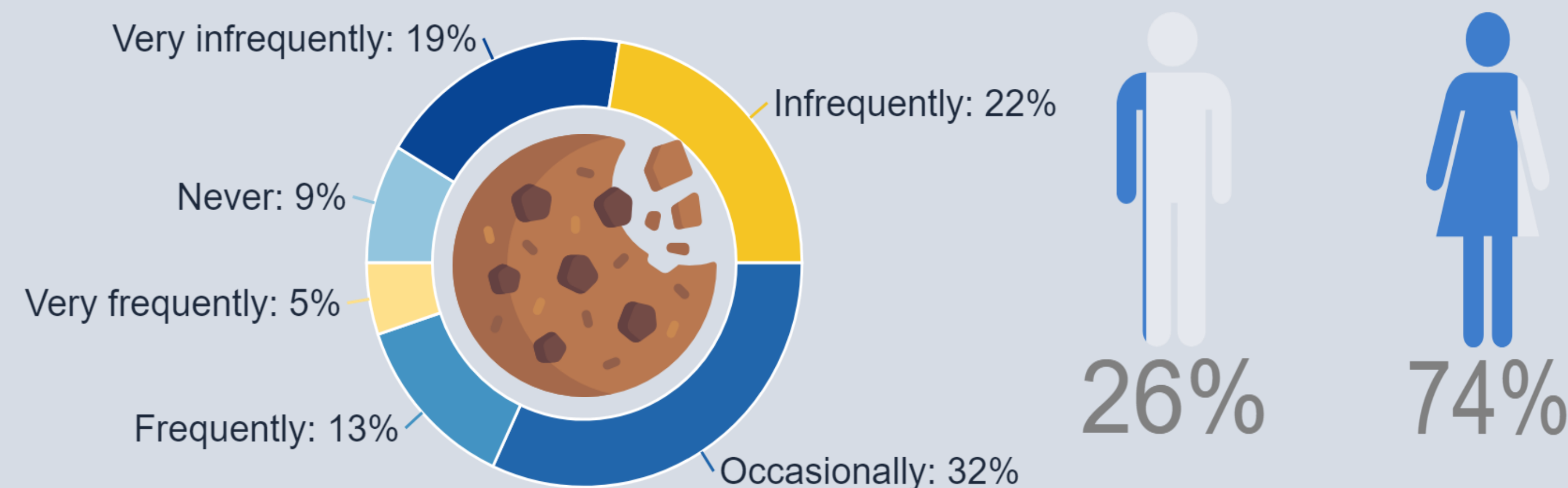


Figure 2: Reason Behind Snack Selection

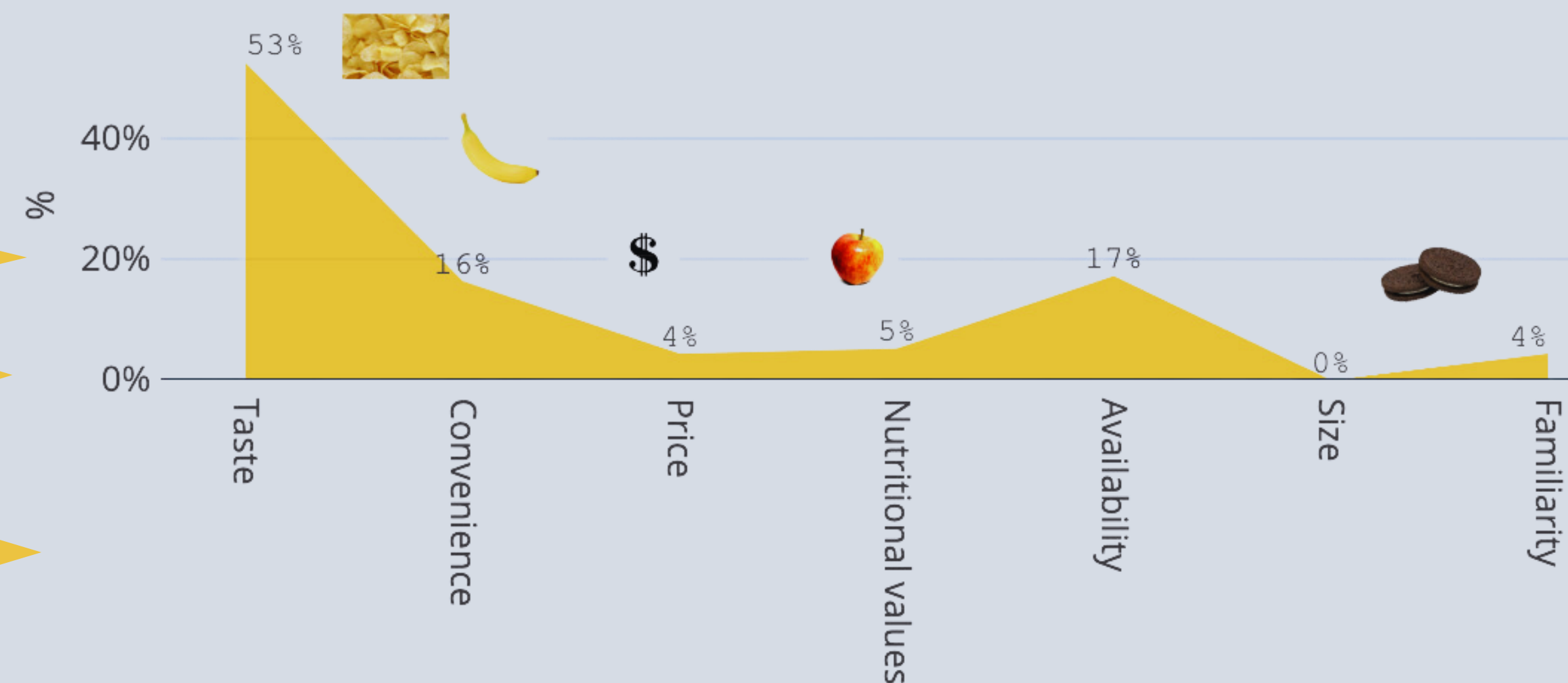


Figure 3: Average of Sleep Per Night

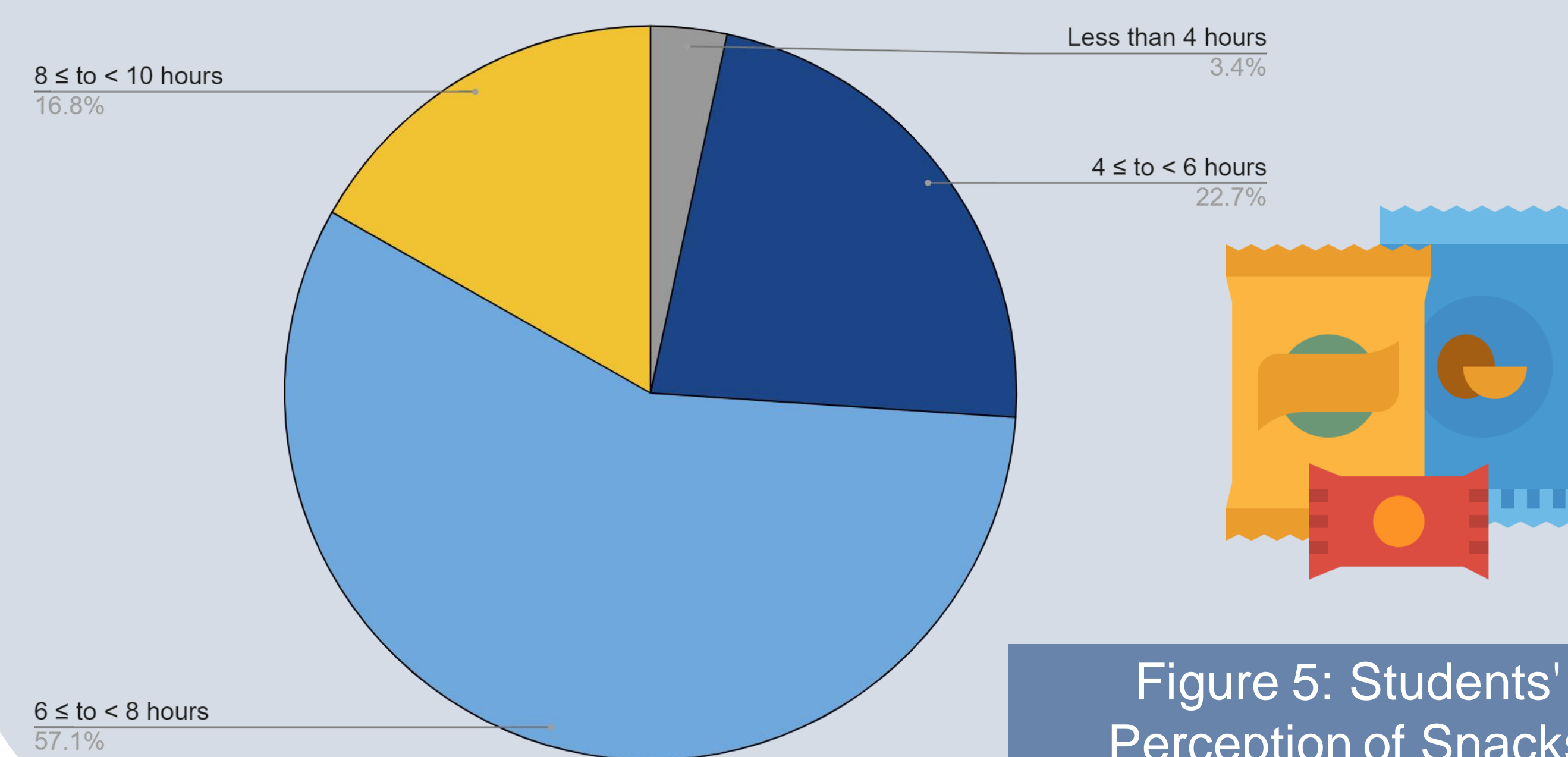


Figure 5: Students' Perception of Snacks

Figure 4: Sleep Quality per Gender



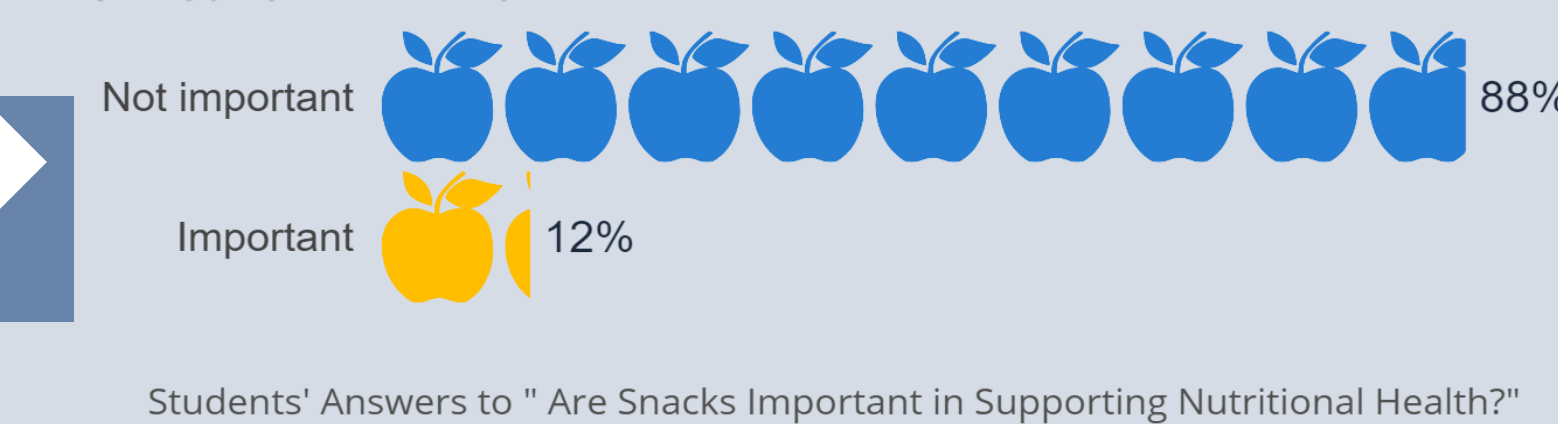
Table 1: Significant p-Values Between Snack Types and Sleep Issues

TYPE OF SNACK	PRESENCE OF SLEEP ISSUES P-VALUE	FALLING/ STAYING ASLEEP P-VALUE
SALTY FOODS	0.210	0.036
SWEET FOODS	0.038	0.078
QUICK MEALS	0.045	0.058
SWEET PASTRIES	0.055	0.444
FROZEN SWEETS	0.103	0.818
FRUITS AND VEGETABLES	0.064	0.086

Table 2: Inferential Statistics Between Sleep and Snacks

TESTS	EXPOSURE VARIABLE	OUTCOME VARIABLE	P-VALUES
PEARSON'S CORRELATION	SNACK FREQUENCY*	SLEEP DURATION*	0.985
CHI-SQUARE	SNACK FREQUENCY**	SLEEP QUALITY**	0.608
CHI-SQUARE	SNACK PORTION SIZE**	SLEEP QUALITY**	0.004
ANOVA	SNACK FREQUENCY**	SLEEP DURATION*	0.876
T-TEST	SNACK PERCEPTION**	SLEEP DURATION*	0.218

*CONTINUOUS VARIABLES
**CATEGORICAL VARIABLES



Conclusion

- The mean sleep duration among UCSD students was found to be around 5.8 hours per Night. College students are more likely to select a snack for its taste, followed by its availability and convenience. More Males reported poor sleep than Females.
- There were associations found between sweet foods and the presence of sleep issues, quick meals and the presence of sleep issues, salty foods with the type of sleep issue (Falling asleep and Staying asleep), sleep quality and portion size preference among the student population sampled.
- The connection of sleep to dietary habits emphasizes the need to educate students and promote healthier lifestyle choices.

Policy Implications

- Encourage educational initiatives within college settings to raise awareness about the impact of late-night snacking on sleep quality and overall health.
- Implement guidelines or regulations within campus dining facilities to promote healthier snack options.
- Incorporate sleep education and healthy lifestyle promotion into existing health and wellness programs offered to college students.
- Support further research and initiatives to understand the specific types of snacks that are most detrimental to sleep and developing targeted interventions to address these issues.

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