

FORKS, FRIENDS, AND FAMILY

Exploring How Social Interactions Influence Nutrition

Habits in Undergraduate Students

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BACKGROUND

- Students develop **poor eating habits** and behaviors in college¹
- Poor dietary habits are linked to **increased rates of obesity** (46%), **type 1 diabetes** (22%), and **cardiovascular diseases** (32%) in university students^{2,5}
- Obesity rates in young adults in the US rose from 32.7% to 40.9% between 2010 to 2020, due to **poor diet and sedentary lifestyles**⁴
- Dietary changes can **reduce the risk** of up to 40% of cancers and 50% of type 2 diabetes cases³
- While interventions often target individual behavior, the role of social interactions, peer norms and group dining, **remains under-explored** in shaping college students' eating habits

OBJECTIVE

To examine how social influences (such as family, friends, and roommates) can affect the dietary habits of undergraduate college students

METHODS

- Cross-sectional study conducted through an anonymous Qualtrics survey
- Targeted undergraduate college students, ages 18-24 (N=124)
- Survey consisted of 25 questions (categorical, matrix, and ranking questions)
- Survey was distributed through; email and social media platforms (Instagram and Snapchat)
- Recruitment period: April 2025 - May 2025
- Statistical Analyses:
 - Chi-Square tests conducted via SPSS v29 were used to assess associations between:
 - Exposure** → **Social Dynamics** (peer influence, family eating habits, roommate behaviors)
 - Outcome** → **Dietary habits** (meal frequency, food choices)

RESULTS

Table 1. Demographic of the Survey Respondents (N=124)

Age	n (%)
18-20	44(35.5)
21-22	74(59.7)
23-24	6(4.8)
Gender	
Male	47(37.9)
Female	77(62.1)
Class Designation	
Freshman	15(12.1)
Sophomore	17(13.7)
Junior	25(20.2)
Senior	67(54.0)
Residential Status	
On-Campus	33(26.6)
Off-Campus	91(73.4)
Living Situation (Off-Campus)	
Friends	70(76.9)
Housemates	7(7.7)
Alone	5(5.5)
Family	4(4.4)

Table 2. Chi-Squared test of nutritional quality when eating with different social groups

Social Group	Statistical Outcome Chi-Squared & P-Value
Roommates	7.624 (p = 0.02)
Friends	2.323 (p = 0.31)
Family	4.753 (p = 0.09)

Table 3. Chi-Squared test of feelings of judgement when eating with different social groups

Social Group	Statistical Outcome Chi-Squared & P-value
Roommates	8.296 (p = 0.04)
Friends	1.165 (p = 0.76)
Family	4.849 (p = 1.83)



Roommate influence was **significantly associated** with nutritional quality (p = 0.02) and feelings of judgment (p = 0.04) in Tables 2 & 3



Friends and family showed **no significant impact**, emphasizing roommates as the more immediate social influence in college in Tables 2 & 3

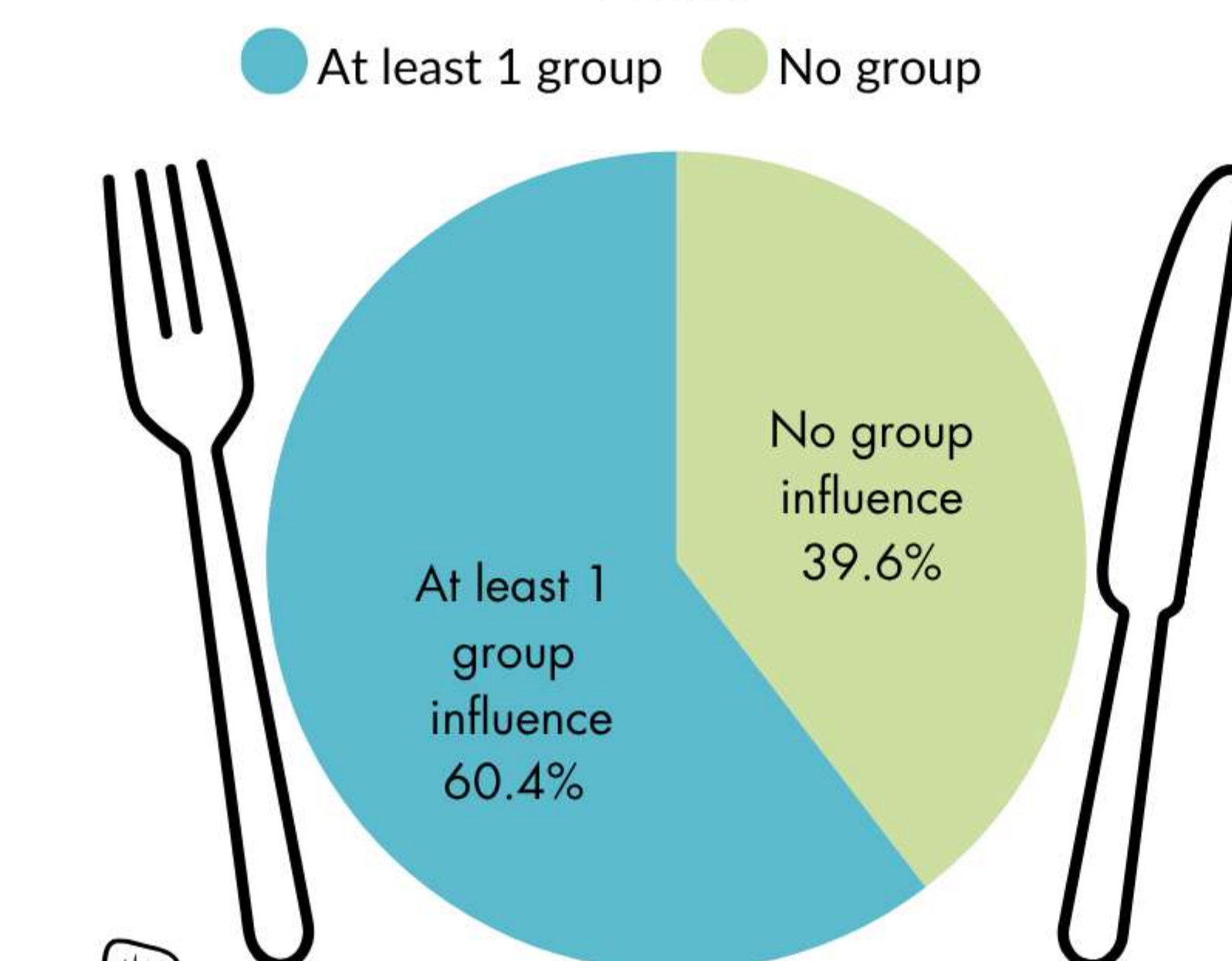


Majority of students (65.7%, n = 81) reported **not feeling social pressure** to eat a certain way, suggesting that **overt peer pressure may not** be a dominant factor in influencing dietary choices among college students



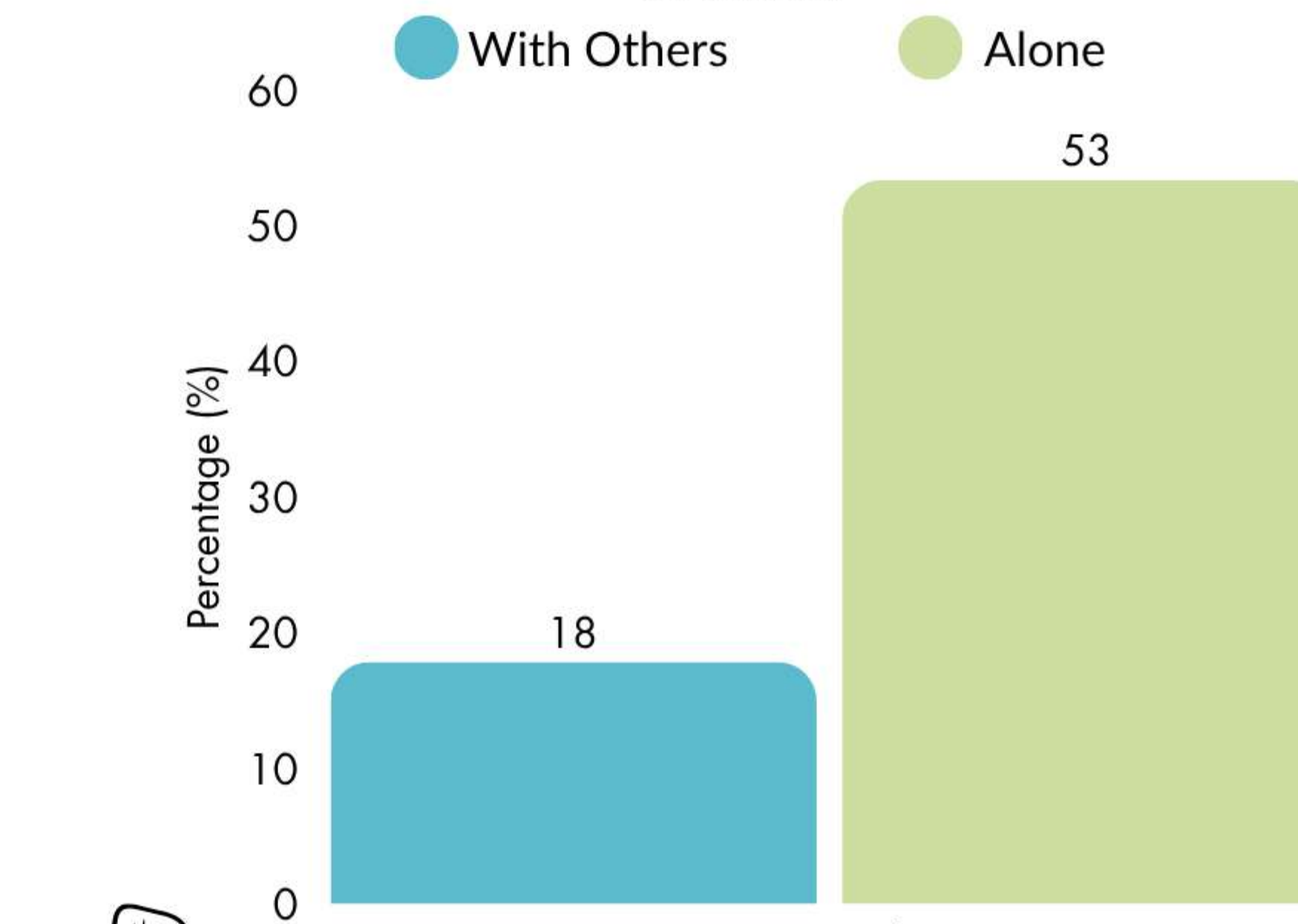
Most students (79.3%, n = 98) reported **not feeling judged** for their food choices, indicating that **perceived judgment from peers may not** be a widespread factor influencing eating behaviors

Figure 1. Presence of Group Influence on Eating Habits



Most students (60.4%, n = 75) reported that at least one social group influenced their eating habits

Figure 2. Healthier Eating Behavior Based on the Company of others



Over half of students (53%, n=65) reported eating healthier when alone, compared to only 18% when around others

CONCLUSIONS

- With respondents reporting being influenced by at least **one social group**, it highlights the **relevance** of social dynamics in dietary behavior
- Findings suggest that **roommates** play a key role in shaping eating habits and self-perception which could be due to the shared living environment
- Our results suggest that **subtle indirect social influences**, like shared spaces and observed habits may influence college student eating habits
- Contrary to prior studies that reported family and friends influence eating habits, our results showed **no significant effect**, suggesting this influence may weaken as college students become more independent⁵
- Future research should explore how **living arrangements** and **shared environments** influence diet, helping to refine targeted interventions in college communities

POLICY IMPLICATIONS

- Promote roommate-focused health activities in campus housing, like shared cooking nights or grocery discounts, to support healthier eating among students who live together
- Design peer nutrition programs that target dorm life specifically, highlighting roommates as a primary influence rather than general peer groups

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REFERENCES

