# Consumption Pattern of Caffeinated Drinks Among Undergraduates in Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria

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## ABSTRACT

**Background:** *Most undergraduate students' academic tight schedule and poor time management have resulted in increased consumption of caffeinated beverages, coupled with urbanization and economic development, which increase their availability and accessibility. Despite its stimulating effects, its impact on health remains underexplored in Nigeria.*

**Objective:** *This study assessed consumption patterns of caffeinated drinks among undergraduate students.*

**Methods:** *A cross-sectional survey was conducted among 400 respondents using a multistage sampling method. Nutritional labels of different caffeinated drinks consumed by the students were examined, such as energy drinks and tea. Data were collected via a self-administered questionnaire on socio-demographics, caffeinated drinks, consumption habits, and perceived effects. Data was analyzed using SPSS version 21.*

**Results:** *The study revealed that 80% of respondents consumed caffeinated drinks daily. Nearly half (49.0%) of the respondents consumed caffeinated drinks occasionally, primarily to feel more awake (44.3%). The most consumed caffeinated drinks were Coca-Cola (90.0%), Lipton (82.8%), and Nescafé (63.0%). 12.5% strongly disagreed, while 26.5% strongly agreed, that price influences the consumption of caffeine products. Furthermore, 7.8% strongly disagreed, while 32.8% strongly agreed, that taste influences the consumption of caffeine products. Statistical analysis showed a significant relationship between age (r= 0.025, p= 0.623) and frequency of caffeine drink consumption. There is a positive but no significant relationship between monthly allowance (r= 0.005, p= 0.922) and frequency of caffeine consumption.*

**Conclusion:** *The study reveals that the consumption of caffeinated drinks among OAU undergraduates is moderate, normal, and not alarming. The factors influencing this include the price and taste of the caffeinated drink, and partying.*

**Keywords:** Caffeine, Consumption Patterns, and Non-alcoholic drink

## INTRODUCTION

Over the last few decades, beverage consumption has been steadily increasing, especially at an alarming rate among adolescents and young adults. Beverages, especially caffeine-containing beverages, have become extremely popular across the globe. A beverage is a drink prepared for human consumption either during a meal or at leisure times (1). There is are variety of beverages which can be broadly classified into alcoholic and non-alcoholic. Alcoholic beverages contain alcohol in varying concentrations, while non-alcoholic drinks comprise soft drinks, fruit juice, smoothies, tea, coffee, and more. At moderate dosages (adults up to 400 mg/day), caffeine can reduce fatigue and improve mood, cognitive function, and alertness by blocking adenosine receptors in the brain (2). However,

excessive intake may lead to insomnia, anxiety, restlessness, gastrointestinal disturbances, and increased heart rate due to overstimulation of the central nervous system (3). According to (4) survey of 442 young people across Nigeria found that nearly three in five respondents consumed energy drinks (59.6%), with males more likely to use them, and tea (71.7%) and coffee (69.2%) emerging as frequent caffeine sources; more than a third reported daily use and many cited insomnia and palpitations, underscoring health risks tied to high-caffeine products. (5), profiled caffeine use among 359 undergraduates at Madonna University and showed a predominance of soda, tea, chocolate, and energy drinks over brewed coffee; 57.1% were "high caffeine consumers" on a composite score, and motivations clustered around taste, alertness, and coping with study demands, while difficulty sleeping and nervousness were among the reported adverse effects.

Caffeine is a white, bitter crystalline alkaloid used medicinally as a central nervous system stimulant and diuretic (6,7). It is the most widely consumed psychoactive substance globally, particularly among adolescents and young adults (8). Caffeine is not a nutrient and therefore, not essential in the diet. The daily caffeine intake recommendation varies; however, a single dose of caffeine < 200mg (two cups of coffee or less) is considered non-harmful in adults (6). Low intake is described as <100 mg or <250 mg/day (6), while moderate intake ranges from 200-400 mg/day (9, 10), and high intake, >500 mg/day (7) or >750 mg/day has been reported (10). In some individuals, caffeine intake greater than 200 mg/day can cause negative side effects such as jitteriness, anxiety, nervousness, and gastrointestinal discomfort (11).

A recent trend of mixing energy drinks with alcohol among students is particularly concerning, as it masks alcohol's effects, leading to increased health risks (12). Factors influencing caffeine consumption include sensory appeal, mood enhancement, increased mental energy and performance, social settings, busy schedules, media influence, and easy availability on campus (13, 14).

Caffeine has the ability to block the brain-signaling molecule adenosine, causing a relative increase in other signaling molecules, such as dopamine and norepinephrine. This change in brain messaging is thought to benefit a person's mood and brain function (8). At low to moderate caffeine consumption, perceived benefit includes improved cognitive and behavioral effects, potentially increased neuroprotection against Alzheimer's and Parkinson's diseases (15). Contrarily, Caffeine's effect on increasing stress hormone, cortisol, and its impact on the sleep cycles of students may cause a cycle of inadequate sleep and, therefore, long-term sleep deprivation. This cycle may have academic, behavioural, and physiological effects on students (16, 17). This study assessed consumption patterns of caffeinated drinks among undergraduate students.

## METHODS
The study was conducted at Obafemi Awolowo University (OAU), Ile-Ife, Osun State, Nigeria. The University boasts 13 faculties, two colleges, and 82 departments, with a student population of approximately 35,000. OAU provides nine halls of residence, with four designated for male undergraduates, four for females, and one for post-graduate students, while some students reside off-campus.

### Study design
A descriptive cross-sectional research design was used to assess caffeine consumption patterns, frequency, and influencing factors among 400 undergraduate students.

### Sampling technique
This study adopted the multistage sampling method. Different hall was selected in the universities, including eight halls of residence were selected. Students from six departments were selected, and 65 participants were selected and included in the study. A total of 395 respondents were randomly selected as participants for the study.

### Inclusion and exclusion criteria
Undergraduates of any age living in campus were included in the study as well, while excluding students living off campus.

### Research instrument
Data were collected using a self-administered questionnaire that covered socio-demographic characteristics and caffeine consumption patterns, and factors influencing the frequency of consumption.

### Ethical approval and informed consent
Before the collection of data, the participants were informed of the objective and requirements for the study and given the assurance that every piece of information obtained would be handled

confidentially. They were assured that the data they provided would be solely used for research purposes and would be carefully handled, thereby avoiding exposure to a third party. Verbal informed consent was obtained from the participants before including them in the study. Institutional Review Board (IRB) approval was secured from Obafemi Awolowo University.

## Method of data collection and statistical analysis

Data analysis was performed using IBM Statistical Package for Social Sciences (SPSS Version 23) software. Descriptive statistical analyses, including frequency and percentage counts, were employed in the presentation of data. Correlation analysis was conducted to test research hypotheses.

## RESULTS

### Socio-economic characteristics of the respondents

In Table 1, the Majority were male, aged between 21 and 25 years (55.0%), and predominantly Christian (86.0%). Most respondents were single (98.3%) and Yoruba ethnic group (91.3%). Less than half were in their first year of study (39.8%). Monthly allowances were mostly above ₦10,000 (49.3%), with 39.3% receiving ₦5,000–₦10,000 and 11.5% receiving less than ₦5,000.

### Type of caffeinated drinks consumed

In Figure 1, less frequently consumed drinks include Bullet (21.0%), Green Tea (27.8%), Monster (31.0%), Cowbell Coffee (51.8%), Fearless (55.3%), Mountain Dew (61.0%), Nescafé (63.0%), while the most commonly consumed beverages were Pepsi (79.8%) Lipton (82.8%), and Coca-Cola (90.0%).

### Consumption frequency of caffeinated drinks

Table 2 shows the consumption frequency of caffeinated drinks. Most respondents consume caffeinated drinks occasionally, with Lipton (67.8%), coffee (49.5%), soft drinks (49.0%), soda (52.8%), and energy drinks (47.0%) constituting the consumption pattern. Many respondents rarely or never consume green tea (71.3%), black tea (84.3%), or energy drinks (36.8%). The

respondents who did not consume caffeinated drinks on a typical day were 8.8%, 80.5% consumed it once, 9.8% consumed it 2-3 times, 0.8% consumed it 4-5 times on a typical day, while 0.3% consumed it more than 4-5 times on a typical day.

### Purpose for consuming caffeinated drinks

In Figure 2, the purpose of consuming caffeinated drinks. Respondents consumed caffeinated drinks to satisfy cravings (77.9%), complement meals (65.6%), feel more awake (44.3%), stay up late (43.0%), and improve focus or performance (30-41%). Few use them for headaches (7.3%), to lessen the effect of hangovers (8.3%), or to be more social (17%), while 13.8% consumed the drinks for no specific purpose.

### Distribution of the perceived benefits of caffeine consumption

In Table 3, 41.5% agreed that caffeine makes them more active, while 68.8% strongly agreed that they work more effectively when they mix two different caffeinated drinks. 44.5% strongly agreed that caffeinated drink makes my thinking more rapid and clear 40.0% agreed that caffeinated drink helps them, 34.3% disagreed and 34.3% agreed that they consume caffeinated drink for its health benefit, 35.0% disagreed that caffeine makes them more productive, 40.3% disagreed that caffeine has no negative effect when consumed moderately while 57.5% strongly agreed that they rely on caffeine to study.

### Perceived experience of caffeine drink consumption

Table 4 reveals that most respondents (69.5%) disagreed that caffeine decreases productivity, while 57.3% indicated that it did not increase their breathing rate. Sleep disturbances were noted by 55.8%, though 44.3% disagreed. 60.6% indicated that caffeine is unhealthy. Stomach upset and nervousness were dismissed by 49.8% and 61.8%, respectively. Additionally, 69.8% do not experience headaches from caffeine, and 59.8% indicated that it causes agitation. Lastly, 69.5% indicated that caffeine does not negatively impact their mood.

**Table 1: Distribution of respondents' socio-economic characteristics**

| Socio-economic characteristics of respondents | Frequency (400) | Percentage (%) |
|---|---|---|
| **Sex** | | |
| Male | 220 | 55.0 |
| Female | 180 | 45.0 |
| **Age (years)** | | |
| 15-20 | 186 | 46.5 |
| 21-25 | 190 | 47.5 |
| 26-30 | 24 | 6.0 |
| **Religion** | | |
| Christianity | 344 | 86.0 |
| Islamic | 56 | 14.0 |
| **Marital status** | | |
| Single | 393 | 98.3 |
| Married | 5 | 1.3 |
| Divorced | 1 | 0.3 |
| Others | 1 | 0.3 |
| **Faculty** | | |
| Agriculture | 62 | 15.5 |
| Administration | 40 | 10.0 |
| Art | 49 | 12.2 |
| Basic medical science | 21 | 5.3 |
| Education | 67 | 16.7 |
| Science | 43 | 10.7 |
| Technology | 41 | 10.3 |
| Environmental Studies | 77 | 19.3 |
| **Level** | | |
| 100 | 159 | 39.8 |
| 200 | 63 | 15.8 |
| 300 | 92 | 23.0 |
| 400 | 70 | 17.5 |
| 500 | 16 | 4.0 |
| **Ethnic group** | | |
| Yoruba | 365 | 91.3 |
| Igbo | 14 | 3.5 |
| Hausa | 4 | 1.0 |
| Preferred not to say | 17 | 4.3 |
| **Mother's occupation** | | |
| Trading | 98 | 24.5 |
| Teaching | 75 | 18.7 |
| Business women | 41 | 10.3 |
| Civil servant | 57 | 14.2 |
| Nurse | 21 | 5.3 |
| Retired | 10 | 2.5 |
| Others | 98 | 24.5 |
| **Father's occupation** | | |
| Business men | 43 | 10.7 |
| Artisan | 10 | 2.5 |
| Farming | 12 | 3.0 |
| Civil servant | 45 | 11.3 |
| Teaching | 56 | 14.0 |
| Trading | 39 | 9.8 |
| Others | 195 | 48.7 |
| **Monthly allowance (N)** | | |
| < 5,000 | 46 | 11.5 |
| 5,000-10,000 | 157 | 39.3 |
| > 10,000 | 197 | 49.3 |
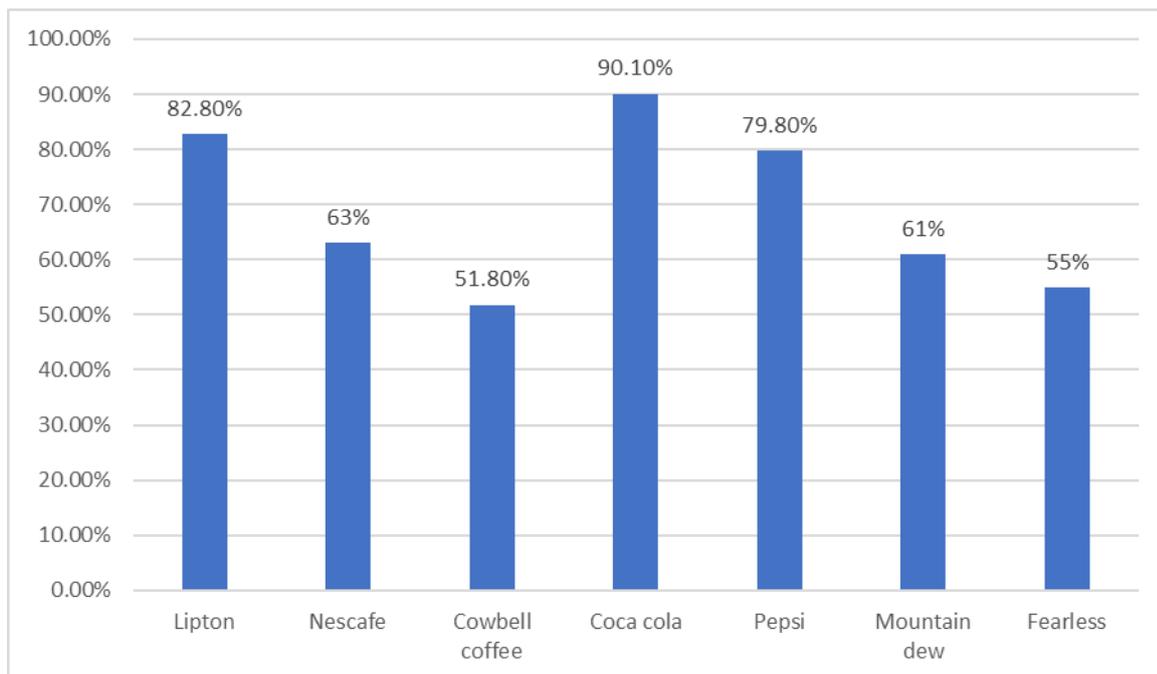
**Figure 1: Caffeinated drinks consumed**

## Perceived factors influencing the consumption of caffeinated drinks

Table 5 reveals the factors influencing the consumption of caffeinated drinks. Price emerged as the most significant factor influencing the consumption of caffeinated drinks (34.8%), 39.8% disagreed that friends play a part in the type of caffeinated drink consumed, and 36.8% disagreed that media or celebrity endorsements contributed to the type of caffeinated drink consumed. 32.4% disagreed that TV advertisements influenced their brand choice. Additionally, 44.5% disagreed that the benefits of caffeine outweighed its risks. 32.5% agreed that they consumed caffeinated drinks at parties, while 40.3% agreed that they consumed caffeinated drinks for their taste, and 30.0% disagreed that they consumed caffeinated drinks out of curiosity about their taste.

## Characteristics of respondents and frequency of caffeine drink consumption

Table 6 reveals the characteristics of respondents and the frequency of caffeine drink consumption. The correlation coefficients ($r = 0.025$ and $r = 0.005$, respectively) demonstrate that age and monthly allowance have very weak positive relationships with the dependent variable. Additionally, the associations are not statistically significant because the p-values (0.922 for monthly allowance and 0.623 for age) are higher than the 0.05 significance level.

**Table 2: Consumption frequency of caffeinated drinks**

| Frequency of caffeinated drinks consumed | Frequency (400) | Percent (%) |
|---|---|---|
| **Lipton** | | |
| Daily | 10 | 2.5 |
| 2-3 times weekly | 50 | 12.5 |
| Occasionally | 271 | 67.8 |
| Never | 69 | 17.3 |
| **Green tea** | | |
| Daily | 2 | 0.5 |
| 2-3 times weekly | 12 | 3.0 |
| Occasionally | 101 | 25.3 |
| Never | 285 | 71.3 |
| **Black tea** | | |
| Daily | 1 | 0.3 |
| 2-3 times weekly | 8 | 2.0 |
| Occasionally | 54 | 13.5 |
| Never | 337 | 84.3 |
| **Coffee e.g Nescafe, Cowbell coffee** | | |
| Daily | 9 | 2.3 |
| 2-3 times weekly | 77 | 19.3 |
| Occasionally | 198 | 49.5 |
| Never | 116 | 29.0 |
| **Caffeinated soft drinks e.g Coca-Cola, Pepsi** | | |
| Daily | 25 | 6.3 |
| 2-3 times weekly | 167 | 41.8 |
| Occasionally | 196 | 49.0 |
| Never | 12 | 3.0 |
| **Energy drinks e.g Monster, fearless, red bull** | | |
| Daily | 12 | 3.0 |
| 2-3 times weekly | 53 | 13.3 |
| Occasionally | 188 | 47.0 |
| Never | 147 | 36.8 |
| **Soda e.g Mountain dew** | | |
| Daily | 5 | 1.3 |
| 2-3 times weekly | 40 | 10.0 |
| Occasionally | 211 | 52.8 |
| Never | 144 | 36.1 |
| **Consumption of caffeinated drinks on a typical day** | | |
| Never | 35 | 8.8 |
| Once | 322 | 80.5 |
| 2-3 times daily | 39 | 9.8 |
| 4-5 times daily | 3 | 0.8 |
| More often | 1 | 0.3 |
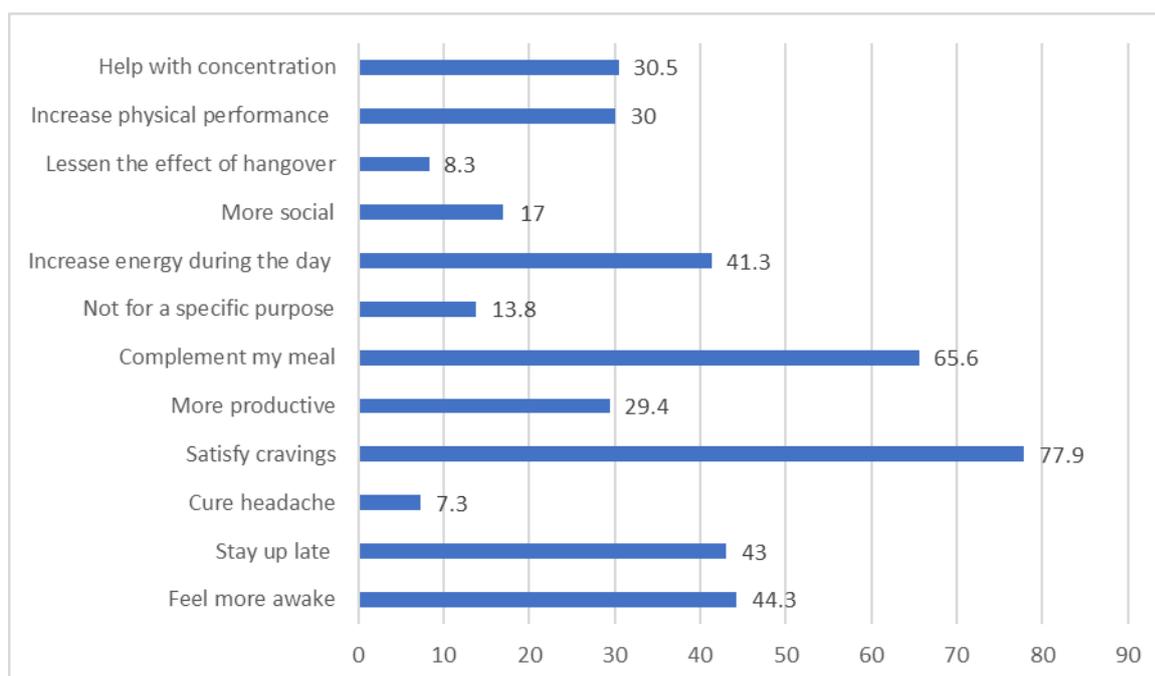
**Figure 2: Purpose for consuming caffeinated drinks**

**Table 3: Distribution of the perceived benefits of caffeine consumption**

| Benefits | Rarely F (%) | Sometimes F (%) | Often F (%) | Never F (%) |
|---|---|---|---|---|
| Caffeinated drink makes me more active | 54 (13.5) | 166 (41.5) | 126 (31.5) | 54 (13.5) |
| I work more effectively when I mix two different caffeinated drinks | 30 (7.5) | 67 (16.8) | 28 (7.0) | 275 (68.8) |
| Caffeinated drink makes my thinking more rapid and clear | 53 (13.3) | 103 (25.8) | 66 (16.5) | 178 (44.5) |
| Caffeinated drink helps me to feel relaxed | 29 (7.3) | 155 (38.8) | 160 (40.0) | 56 (14.0) |
| I consume caffeinated drink for its health benefit | 49 (12.3) | 136 (34.0) | 78 (19.5) | 137 (34.3) |
| Caffeine makes me more productive | 52 (13.0) | 143 (35.0) | 124 (31.0) | 81 (20.3) |
| Caffeine has no negative effect when consumed moderately | 30 (7.5) | 161 (40.3) | 160 (40.0) | 49 (12.3) |
| I rely on caffeine to study | 41 (10.3) | 81 (20.3) | 48 (12.0) | 230 (57.5) |

**Table 4: Perceived experience of caffeine drink consumption**

| Disadvantage | Rarely F (%) | Sometimes F (%) | Often F (%) | Never F (%) |
|---|---|---|---|---|
| Caffeinated drink makes me less productive | 61 (15.3) | 44 (11.0) | 17 (4.3) | 278 (69.5) |
| Consuming caffeinated drinks increases my breathing rate | 47 (11.8) | 100 (25.0) | 24 (6.0) | 228 (57.3) |
| Caffeinated drink disturbs my sleep | 40 (10.0) | 93 (23.3) | 90 (22.5) | 177 (44.3) |
| Consuming caffeine is unhealthy | 54 (13.5) | 189 (47.3) | 53 (13.3) | 104 (26.0) |
| Caffeinated drink upsets my stomach | 52 (13.0) | 117 (29.3) | 31 (7.8) | 199 (49.8) |
| Caffeinated drink makes me nervous and restless | 52 (13.0) | 65 (16.3) | 36 (9.0) | 247 (61.8) |
| Caffeinated drink gives me headache | 48 (12.0) | 53 (13.3) | 20 (5.0) | 279 (69.8) |
| Caffeinated drink makes me feel agitated | 41 (10.3) | 94 (23.5) | 26 (6.5) | 239 (59.8) |
| Caffeine makes me feel mood | 42 (10.5) | 63 (15.8) | 17 (4.3) | 278 (69.5) |

**Table 5: Perceived factors influencing the consumption of caffeinated drinks**

| Factors influencing the consumption of caffeinated drinks | Strongly disagree F (%) | Disagree F (%) | Agree F (%) | Strongly agree F (%) |
|---|---|---|---|---|
| Price is the most important factor in my caffeine product choice | 50 (12.5) | 105 (26.3) | 139 (34.8) | 106 (26.5) |
| My friends play a part in the type of caffeinated drink I consume | 111 (27.8) | 159 (39.8) | 88 (22.0) | 42 (10.5) |
| Media and celebrity endorsers play a part in the type of caffeinated drink consume | 140 (35.0) | 147 (36.8) | 75 (18.8) | 38 (9.5) |
| Tv advertisement plays a part in my choice of caffeinated drink brand | 123 (30.8) | 129 (32.4) | 102 (25.5) | 46 (11.5) |
| The benefits of consuming caffeine outweigh the risk | 58 (14.5) | 178 (44.5) | 118 (29.5) | 46 (11.5) |
| I consume caffeinated drinks every time I am at a party | 58 (14.5) | 111 (27.8) | 130 (32.5) | 101 (25.3) |
| I consume caffeinated drinks for its taste | 31 (7.8) | 77 (19.3) | 161 (40.3) | 131 (32.8) |
| I consume caffeinated drinks out of curiosity of its taste | 59 (14.8) | 120 (30.0) | 105 (26.3) | 116 (29.0) |

**Table 6: Characteristics of respondents and frequency of caffeine drink consumption**

| Variable | Correlation coefficient (r) | Correlation of determination (r²) | Level of significance (p) |
|---|---|---|---|
| Age in years | 0.025 | 0.000625 | 0.623 |
| Monthly allowance | 0.005 | 0.000025 | 0.922 |

## DISCUSSION

This research unveiled caffeine consumption patterns among undergraduates at Obafemi Awolowo University, Ile-Ife, Osun State. Most respondents were single, reflecting typical undergraduate age and social contexts that encourage peer-driven caffeine use (18). Less than half were first-years, with higher consumption seen in upper levels due to increased workload (19). Monthly allowances varied, affecting both frequency and type of caffeinated drink consumed, with higher-income students affording branded options and lower-income ones opting for cheaper alternatives (20, 21).

The study also unveils the consumption frequency of caffeinated drinks. Low consumption of green tea and black tea aligns with (22), citing limited availability, higher costs, and unfamiliarity. Most students consumed caffeine once daily, with heavy use rare, reflecting (23), though (24) warn of dependency risks. Energy drinks were taken occasionally, often during exams (20), but frequent use is linked to cardiovascular and anxiety risks (21). Consistent with (25) findings in

a study conducted among U.S. university students, Coca-Cola, Pepsi, and Mountain Dew were identified as the most commonly consumed caffeinated drinks. The findings indicate that all respondents consumed caffeine to varying degrees, corroborating the (26) finding, which reported universal caffeine consumption among the study participants. In the study on moderate caffeine consumption and cardiovascular disease risk conducted by (27), the findings suggested that lower levels of caffeine consumption might still offer protective effects without the potential side effects associated with higher consumption, such as jitteriness or insomnia.

The majority of the respondents reveal that the purpose of consuming caffeinated drinks is to stay awake, matching (23) and (24), who linked it to late-night studying and fatigue management. Almost half of the respondents reveal that caffeine increases their performance level, consistent with (28). Fewer used it for headaches, hangovers, or socializing, contrasting with (29), who found higher social motivations. Those with no specific reason suggest habitual or incidental use, influenced by availability (21).

The perceived benefit of consuming caffeinated drinks by the respondents shows that more than half strongly agreed they work better mixing caffeinated drinks, a stress-period strategy (23), but risky due to excessive intake (21). A few of the respondents doubted caffeine boosts productivity, aligning with (24). Moderate-use safety was rejected by nearly half of the respondents, reflecting rising risk awareness (29). A notable proportion of respondents reported that caffeine increases their activity levels, while others associated its consumption with enhanced cognitive clarity and rapid thinking. These results align with (17) assertion that low to moderate caffeine intake improves cognitive and behavioral performance. Additionally, participants cited various motivations for caffeine consumption, including satisfying cravings, complementing meals, staying awake, and boosting energy levels. These findings are consistent with the study among Pakistani students (24), which also identified staying awake, relieving headaches, satisfying cravings, and enjoying taste as primary reasons for caffeine use.

Furthermore, the majority relied on caffeine for studying, supporting (30) on its role in coping with workload and poor sleep. The majority reported no increased breathing rate, and many dismissed stomach upset or nervousness, contradicting (21) on underreporting side effects. Sleep disturbance was noted as well by some of the respondents, aligning with (24) and (23). While the majority saw caffeine as unhealthy, it may cause headaches or influence mood, reflecting (18). Additionally, no link was found between age or allowance and perceptions, contrasting (13). A study by (31) showed that caffeine enhances cognitive performance, particularly in memory, alertness, and concentration, especially in individuals experiencing sleep deprivation when moderate quantity is consumed. Additionally, moderate consumption of caffeine has been associated with a reduced risk of neurodegenerative diseases such as Alzheimer's and Parkinson's (32). Contrarily, excessive caffeine intake can lead to several negative health outcomes, including anxiety, insomnia, and an increased risk of heart palpitations and high blood pressure, particularly in sensitive individuals (33). According to (34) found that high caffeine consumption can lead to symptoms of jitteriness, nervousness, and an increased heart rate, particularly in those who are not habitual consumers. According to (35), consuming caffeine close to bedtime can delay sleep onset, reduce sleep duration, and lead to a decrease in overall sleep quality, which subsequently affects daytime functioning and physical activity performance. Additionally, caffeine can cause gastrointestinal discomfort in some individuals, including acid reflux, nausea, and stomach cramps, which can hinder physical activity, especially in high-intensity exercises, as it may cause discomfort or distractions during workouts (36).

The study also examined perceived factors influencing the consumption of caffeine drinks by the respondents. Social influence was limited, with nearly half of the respondents rejecting peer impact and dismissing media or celebrity influence, contrasting (18) but aligning with (23) on functional, study-related motivations. Advertising impact was also low, supporting (19). Most of the respondents felt caffeine's benefits did not outweigh risks, echoing (24). However, Situational factors included parties and taste, with taste a strong driver (29), though some denied curiosity as a motive, suggesting habitual preference. The majority of respondents disagreed that the benefits of caffeine consumption outweigh its risks. However, many agreed that moderate caffeine consumption poses no significant health risks, suggesting an awareness of its potential adverse effects when consumed excessively. Additionally, most researches support these perceptions, showing that moderate caffeine intake can improve cognitive function, especially in tasks requiring attention and memory (37, 38).

## CONCLUSION
These findings reveal that the consumption rate of caffeinated drinks among undergraduates in Obafemi Awolowo University is moderate, normal, and not in an alarming state. Moreover, there is no significant relationship between socio-economic characteristics and the frequency of caffeine consumption. It can be suggested that the price of a caffeinated drink, the taste of a drink, and partying are the major factors that influence the consumption of caffeinated drinks among students. The study enlightened students to become aware of caffeine-containing drinks

## Conflict of Interest

The authors declare no conflict of interest.

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