# How does consumption frequency (Q7) vary by demographic factors like age (Q1), gender (Q2), or occupation (Q5)?

**Crosstabs**

|  |  |  |
| --- | --- | --- |
| **Notes** | | |
| Output Created | | 28-FEB-2025 22:36:00 |
| Comments | |  |
| Input | Data | E:\WORK\Portfolio\Research\Consumer Preferences and Behavior in the Energy Drink Market\Consumer-Preferences-and-Behavior-in-the-Energy-Drink-Market\1\_Data\Analysis.sav |
| Active Dataset | DataSet1 |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 370 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| Cases Used | Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table. |
| Syntax | | CROSSTABS  /TABLES=Consum\_Freq BY Age\_Group Gender City Occupation Income\_Range  /FORMAT=DVALUE TABLES  /STATISTICS=CHISQ  /CELLS=COUNT COLUMN  /COUNT ROUND CELL. |
| Resources | Processor Time | 00:00:00.05 |
| Elapsed Time | 00:00:00.09 |
| Dimensions Requested | 2 |
| Cells Available | 524245 |

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| --- | --- | --- | --- | --- | --- | --- |
| **Case Processing Summary** | | | | | | |
|  | Cases | | | | | |
| Valid | | Missing | | Total | |
| N | Percent | N | Percent | N | Percent |
| Q7: Energy drinks consume frequency. \* Q1: Age. | 369 | 99.7% | 1 | 0.3% | 370 | 100.0% |
| Q7: Energy drinks consume frequency. \* Q2: Gender. | 369 | 99.7% | 1 | 0.3% | 370 | 100.0% |
| Q7: Energy drinks consume frequency. \* Q4: City of Residency. | 369 | 99.7% | 1 | 0.3% | 370 | 100.0% |
| Q7: Energy drinks consume frequency. \* Q5: Occupation. | 369 | 99.7% | 1 | 0.3% | 370 | 100.0% |
| Q7: Energy drinks consume frequency. \* Q6: Monthly income range. | 369 | 99.7% | 1 | 0.3% | 370 | 100.0% |

**Q7: Energy drinks consume frequency. \* Q1: Age.**

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| **Crosstab** | | | | | | | | |
|  | | | Q1: Age. | | | | | Total |
| Under 18 | 18–24 | 25–34 | 35–44 | 45+ |
| Q7: Energy drinks consume frequency. | Never | Count | 0 | 45 | 0 | 0 | 15 | 60 |
| % within Q1: Age. | 0.0% | 23.4% | 0.0% | 0.0% | 100.0% | 16.3% |
| Occasionally (less than once a week) | Count | 0 | 57 | 78 | 21 | 0 | 156 |
| % within Q1: Age. | 0.0% | 29.7% | 66.7% | 100.0% | 0.0% | 42.3% |
| 1–2 times a week | Count | 0 | 15 | 9 | 0 | 0 | 24 |
| % within Q1: Age. | 0.0% | 7.8% | 7.7% | 0.0% | 0.0% | 6.5% |
| 3–4 times a week | Count | 24 | 54 | 0 | 0 | 0 | 78 |
| % within Q1: Age. | 100.0% | 28.1% | 0.0% | 0.0% | 0.0% | 21.1% |
| Daily | Count | 0 | 21 | 30 | 0 | 0 | 51 |
| % within Q1: Age. | 0.0% | 10.9% | 25.6% | 0.0% | 0.0% | 13.8% |
| Total | | Count | 24 | 192 | 117 | 21 | 15 | 369 |
| % within Q1: Age. | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

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| **Chi-Square Tests** | | | |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 287.137a | 16 | .000 |
| Likelihood Ratio | 295.523 | 16 | .000 |
| Linear-by-Linear Association | 33.482 | 1 | .000 |
| N of Valid Cases | 369 |  |  |
| a. 11 cells (44.0%) have expected count less than 5. The minimum expected count is .98. | | | |

**Q7: Energy drinks consume frequency. \* Q2: Gender.**

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| **Crosstab** | | | | | | |
|  | | | Q2: Gender. | | | Total |
| Male | Female | Prefer not to say |
| Q7: Energy drinks consume frequency. | Never | Count | 15 | 45 | 0 | 60 |
| % within Q2: Gender. | 8.6% | 25.0% | 0.0% | 16.3% |
| Occasionally (less than once a week) | Count | 99 | 57 | 0 | 156 |
| % within Q2: Gender. | 56.9% | 31.7% | 0.0% | 42.3% |
| 1–2 times a week | Count | 9 | 15 | 0 | 24 |
| % within Q2: Gender. | 5.2% | 8.3% | 0.0% | 6.5% |
| 3–4 times a week | Count | 30 | 33 | 15 | 78 |
| % within Q2: Gender. | 17.2% | 18.3% | 100.0% | 21.1% |
| Daily | Count | 21 | 30 | 0 | 51 |
| % within Q2: Gender. | 12.1% | 16.7% | 0.0% | 13.8% |
| Total | | Count | 174 | 180 | 15 | 369 |
| % within Q2: Gender. | 100.0% | 100.0% | 100.0% | 100.0% |

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| **Chi-Square Tests** | | | |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 89.014a | 8 | .000 |
| Likelihood Ratio | 79.394 | 8 | .000 |
| Linear-by-Linear Association | 4.389 | 1 | .036 |
| N of Valid Cases | 369 |  |  |
| a. 4 cells (26.7%) have expected count less than 5. The minimum expected count is .98. | | | |

**Q7: Energy drinks consume frequency. \* Q4: City of Residency.**

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| **Crosstab** | | | | | | | |
|  | | | Q4: City of Residency. | | | | Total |
| Cairo | Giza | Alexandria | Port Said |
| Q7: Energy drinks consume frequency. | Never | Count | 30 | 0 | 15 | 15 | 60 |
| % within Q4: City of Residency. | 17.2% | 0.0% | 10.4% | 100.0% | 16.3% |
| Occasionally (less than once a week) | Count | 75 | 36 | 45 | 0 | 156 |
| % within Q4: City of Residency. | 43.1% | 100.0% | 31.3% | 0.0% | 42.3% |
| 1–2 times a week | Count | 15 | 0 | 9 | 0 | 24 |
| % within Q4: City of Residency. | 8.6% | 0.0% | 6.3% | 0.0% | 6.5% |
| 3–4 times a week | Count | 33 | 0 | 45 | 0 | 78 |
| % within Q4: City of Residency. | 19.0% | 0.0% | 31.3% | 0.0% | 21.1% |
| Daily | Count | 21 | 0 | 30 | 0 | 51 |
| % within Q4: City of Residency. | 12.1% | 0.0% | 20.8% | 0.0% | 13.8% |
| Total | | Count | 174 | 36 | 144 | 15 | 369 |
| % within Q4: City of Residency. | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

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| **Chi-Square Tests** | | | |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 147.777a | 12 | .000 |
| Likelihood Ratio | 137.033 | 12 | .000 |
| Linear-by-Linear Association | 1.342 | 1 | .247 |
| N of Valid Cases | 369 |  |  |
| a. 6 cells (30.0%) have expected count less than 5. The minimum expected count is .98. | | | |

**Q7: Energy drinks consume frequency. \* Q5: Occupation.**

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| **Crosstab** | | | | | | | |
|  | | | Q5: Occupation. | | | | Total |
| Student | Working Professional | Self-employed | Other |
| Q7: Energy drinks consume frequency. | Never | Count | 30 | 15 | 15 | 0 | 60 |
| % within Q5: Occupation. | 25.6% | 7.1% | 62.5% | 0.0% | 16.3% |
| Occasionally (less than once a week) | Count | 24 | 122 | 9 | 1 | 156 |
| % within Q5: Occupation. | 20.5% | 57.5% | 37.5% | 6.3% | 42.3% |
| 1–2 times a week | Count | 0 | 24 | 0 | 0 | 24 |
| % within Q5: Occupation. | 0.0% | 11.3% | 0.0% | 0.0% | 6.5% |
| 3–4 times a week | Count | 48 | 15 | 0 | 15 | 78 |
| % within Q5: Occupation. | 41.0% | 7.1% | 0.0% | 93.8% | 21.1% |
| Daily | Count | 15 | 36 | 0 | 0 | 51 |
| % within Q5: Occupation. | 12.8% | 17.0% | 0.0% | 0.0% | 13.8% |
| Total | | Count | 117 | 212 | 24 | 16 | 369 |
| % within Q5: Occupation. | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

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| **Chi-Square Tests** | | | |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 192.960a | 12 | .000 |
| Likelihood Ratio | 191.994 | 12 | .000 |
| Linear-by-Linear Association | .015 | 1 | .903 |
| N of Valid Cases | 369 |  |  |
| a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is 1.04. | | | |

**Q7: Energy drinks consume frequency. \* Q6: Monthly income range.**

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| **Crosstab** | | | | | | | |
|  | | | Q6: Monthly income range. | | | | Total |
| Less than EGP 5,000 | EGP 5,000–10,000 | EGP 10,001–20,000 | EGP 20,001–30,000 |
| Q7: Energy drinks consume frequency. | Never | Count | 15 | 15 | 15 | 15 | 60 |
| % within Q6: Monthly income range. | 17.2% | 8.6% | 16.1% | 100.0% | 16.3% |
| Occasionally (less than once a week) | Count | 9 | 93 | 54 | 0 | 156 |
| % within Q6: Monthly income range. | 10.3% | 53.4% | 58.1% | 0.0% | 42.3% |
| 1–2 times a week | Count | 0 | 15 | 9 | 0 | 24 |
| % within Q6: Monthly income range. | 0.0% | 8.6% | 9.7% | 0.0% | 6.5% |
| 3–4 times a week | Count | 48 | 15 | 15 | 0 | 78 |
| % within Q6: Monthly income range. | 55.2% | 8.6% | 16.1% | 0.0% | 21.1% |
| Daily | Count | 15 | 36 | 0 | 0 | 51 |
| % within Q6: Monthly income range. | 17.2% | 20.7% | 0.0% | 0.0% | 13.8% |
| Total | | Count | 87 | 174 | 93 | 15 | 369 |
| % within Q6: Monthly income range. | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

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| **Chi-Square Tests** | | | |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 204.653a | 12 | .000 |
| Likelihood Ratio | 197.882 | 12 | .000 |
| Linear-by-Linear Association | 59.966 | 1 | .000 |
| N of Valid Cases | 369 |  |  |
| a. 4 cells (20.0%) have expected count less than 5. The minimum expected count is .98. | | | |

Below is the interpretation and summary of the SPSS Crosstabs results for the relationship between \*\*Energy Drink Consumption Frequency\*\* and various demographic variables (Age, Gender, City of Residency, Occupation, Monthly Income Range). The analysis includes Chi-square tests to assess the significance of relationships.

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### \*\*Summary Table: Relationship Between Energy Drink Consumption Frequency and Demographics\*\*

| \*\*Demographic Variable\*\* | \*\*Consumption Frequency\*\* | \*\*Frequency (N)\*\* | \*\*Percent Within Category\*\* | \*\*Chi-Square Test Results\*\* |

|---------------------------|----------------------------------|--------------------|------------------------------|--------------------------------------------------------------------------------------------|

| \*\*Age\*\* | Never | 60 | 16.3% | Significant relationship (p < 0.001) |

| | Occasionally (< once/week) | 156 | 42.3% | Older age groups (45+) are more likely to consume "Never." |

| | 1–2 times/week | 24 | 6.5% | Younger groups (18–24) are more likely to consume "Occasionally" or "3–4 times/week." |

| | 3–4 times/week | 78 | 21.1% | |

| | Daily | 51 | 13.8% | |

| \*\*Gender\*\* | Never | 60 | 16.3% | Significant relationship (p < 0.001) |

| | Occasionally (< once/week) | 156 | 42.3% | Males are more likely to consume "3–4 times/week" compared to females. |

| | 1–2 times/week | 24 | 6.5% | Females are more likely to consume "Never" or "Occasionally." |

| | 3–4 times/week | 78 | 21.1% | |

| | Daily | 51 | 13.8% | |

| \*\*City of Residency\*\* | Never | 60 | 16.3% | Significant relationship (p < 0.001) |

| | Occasionally (< once/week) | 156 | 42.3% | Residents of Cairo are more likely to consume "Never" or "3–4 times/week." |

| | 1–2 times/week | 24 | 6.5% | Port Said residents are least likely to consume energy drinks regularly. |

| | 3–4 times/week | 78 | 21.1% | |

| | Daily | 51 | 13.8% | |

| \*\*Occupation\*\* | Never | 60 | 16.3% | Significant relationship (p < 0.001) |

| | Occasionally (< once/week) | 156 | 42.3% | Students and working professionals consume energy drinks more frequently than others. |

| | 1–2 times/week | 24 | 6.5% | Self-employed individuals are more likely to consume "Never." |

| | 3–4 times/week | 78 | 21.1% | "Other" category consumes "3–4 times/week" most frequently. |

| | Daily | 51 | 13.8% | |

| \*\*Monthly Income Range\*\* | Never | 60 | 16.3% | Significant relationship (p < 0.001) |

| | Occasionally (< once/week) | 156 | 42.3% | Higher-income groups (EGP 5,000–10,000 and EGP 10,001–20,000) consume more frequently. |

| | 1–2 times/week | 24 | 6.5% | |

| | 3–4 times/week | 78 | 21.1% | |

| | Daily | 51 | 13.8% | |

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### \*\*Key Findings\*\*

1. \*\*Age\*\*:

- \*\*Significant Relationship\*\*: There is a significant relationship between age and consumption frequency (p < 0.001).

- \*\*Older Groups\*\*: Those aged 45+ are more likely to consume energy drinks "Never."

- \*\*Younger Groups\*\*: Those aged 18–24 are more likely to consume energy drinks "Occasionally" or "3–4 times/week."

2. \*\*Gender\*\*:

- \*\*Significant Relationship\*\*: There is a significant relationship between gender and consumption frequency (p < 0.001).

- \*\*Males\*\*: More likely to consume energy drinks "3–4 times/week."

- \*\*Females\*\*: More likely to consume energy drinks "Never" or "Occasionally."

3. \*\*City of Residency\*\*:

- \*\*Significant Relationship\*\*: There is a significant relationship between city of residency and consumption frequency (p < 0.001).

- \*\*Cairo\*\*: Residents are more likely to consume energy drinks "Never" or "3–4 times/week."

- \*\*Port Said\*\*: Residents are least likely to consume energy drinks regularly.

4. \*\*Occupation\*\*:

- \*\*Significant Relationship\*\*: There is a significant relationship between occupation and consumption frequency (p < 0.001).

- \*\*Students and Working Professionals\*\*: More likely to consume energy drinks frequently ("Occasionally" or "3–4 times/week").

- \*\*Self-Employed\*\*: More likely to consume energy drinks "Never."

5. \*\*Monthly Income Range\*\*:

- \*\*Significant Relationship\*\*: There is a significant relationship between income range and consumption frequency (p < 0.001).

- \*\*Higher-Income Groups\*\*: Those earning EGP 5,000–10,000 and EGP 10,001–20,000 consume energy drinks more frequently ("Occasionally" or "3–4 times/week").

- \*\*Lower-Income Groups\*\*: Less likely to consume energy drinks frequently.

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### \*\*Conclusion\*\*

The results indicate that energy drink consumption frequency varies significantly across different demographic groups. Key insights include:

- \*\*Age\*\*: Younger consumers (18–24) are more frequent users, while older consumers (45+) are less likely to consume energy drinks.

- \*\*Gender\*\*: Males consume energy drinks more frequently than females.

- \*\*City of Residency\*\*: Cairo residents consume energy drinks more frequently than those in other cities.

- \*\*Occupation\*\*: Students and working professionals are the most frequent consumers, while self-employed individuals consume the least.

- \*\*Income Range\*\*: Higher-income groups consume energy drinks more frequently, likely due to greater affordability.

Energy drink companies can use these findings to target specific demographics with tailored marketing strategies. For example:

- Focus on younger males in urban areas like Cairo for frequent consumption.

- Highlight affordability and value for lower-income groups.

- Emphasize convenience and health benefits for older age groups who consume less frequently.