

AWARENESS AND CONSUMPTION HABITS OF ENERGY DRINKS AMONG COLLEGE GOING STUDENTS

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ABSTRACT

India has witnessed a tremendous increase in the consumption of energy drinks and the ED market currently stands at 14 bn INR and is confident of future growth by targeting the millennial's who are willing to try new beverages. (4) There is a lack of studies related to energy drinks- awareness, consumption patterns, reasons for consuming energy drinks, harmful effects and many other aspects in the Indian context. The current study is aimed at analyzing the awareness regarding energy drinks as well as the consumption habits of college going students.

Previous studies connected with the topic of study were reviewed to design a survey instrument. An online survey using google forms was used to gather data from 418 randomly surveyed students from the State of Maharashtra.

In conclusion of this study it can be stated that there is a high awareness among college going students regarding energy drinks in general as well as with regards to their content and the harmful effects. About 2/3rd respondents reported confusion whether energy drink is the same as soft drink or sports drink. There is not much difference in the respondent's preference for energy drinks with sugar or without sugar. 75% have tried energy drinks and 54% respondents choose to consume energy drinks in spite of reading composition and warning about possible health hazards. 44% respondents can be said to display responsible consumption behavior as they rarely or sometimes consume energy drinks. Mixing alcohol with energy drink is not very common. Majority of the respondents consumed energy drinks at night and for reasons such as parties, study and sports.

KEYWORDS

Energy Drink, Awareness, Consumption Habits, Reasons for consumption, Harmful effects

INTRODUCTION

Energy drink is a stimulating drink usually containing high amounts of sugar and caffeine as well as many other ingredients such as taurine, guarana, vitamin B etc. said to elevate mood and energy, relieve stress and fatigue, improve concentration, and provide nutritional value as well as taste.

Producers have successfully promoted energy drinks as a product which can provide psychological and physical motivation. Benefits of enhanced attention and quick response can be attributed to the high caffeine content in the energy drink. (1)

It comes as no surprise that it is very popular among the youth globally. There have been studies that support the belief that energy drinks have desirable effects on the frame of mind, nervousness as well as thinking function. Similarly several studies have pointed out the health risks in general due to the contents, over consumption or when consumed together with alcohol. (3)

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BACKGROUND

A study conducted with US youth adolescents as well as adults over a 14 year study period shows that consumption of energy drinks has grown substantially and that these drinks are a major source of caffeine among those who consume them.(2)

A study among Korean youth reported that approximately half of the respondents had knowledge of energy drinks, while the almost other half had heard of energy drinks but they did not in the real sense know what is an energy drink. However, a high proportion of respondents at 76.9% had experience with energy drinks. (5) Another study in Saudi

Arabia stated that about 45% respondents consumed energy drinks, 69.6% did not know the exact definition of energy drinks. The majority of the adolescents 67% who participated in the study carried out by Musaiger et al. think that energy drinks are soft drinks.(6) while this kind of confusion about energy drinks as a type of sports drink was seen among 12.5% of the respondents in a study conducted in the US and reported that that many youth may be unaware or misinformed about the potential health effects and nutritional content of energy drinks.(14) A survey conducted with high school students from a region in Central Italy concluded that about 28 percent participants consumed energy drinks and the awareness about the composition or key ingredients in energy drinks among these participants was very high at 93% (7). A study involving Korean youth showed that a large number of respondents involved in the study were unaware of the active ingredients, particularly caffeine, in the energy drinks. (5) A study among Polish adolescents revealed that apart from students studying medicine, others lacked knowledge of the main ingredients of energy drinks (8)

Several studies conducted in different countries such as USA, Pakistan Korea and Poland discussed the reasons for consumption of energy drinks such as sleep deprivation, need for energy, to improve athletic performance and as a mixer with alcohol during parties (10). A study of Polish youngsters opined that driving and examinations were the most common activity before which energy drinks were consumed. (8). Another study showed that the main activities for which young people use these drinks are: sport, leisure, pleasure, study. (7)The main reason for using energy drinks was to stay awake (5) and enjoyment being the principal reason.(8) A study among medical students in Karachi confirmed that they regularly used energy drinks as they believed that energy drinks helped in keeping them awake during studies and project completion as well as enjoyment. (13)

With regards to safety of consuming ED, a study in US reported that 19.5% perceived that energy drinks are safe to consume for teenagers (14) while a study among university students in Saudi Arabia revealed that majority of the students 82% consider energy drinks to be more harmful than beneficial (15) There are several studies reporting the adverse effects. Common consequences of energy drink consumption reported are fast heartbeats, sleeplessness and headache (10, 11) weight gain and fatigue (13) Additional side effects such as nausea, vomiting, diarrhea, chest pain, seizure were also reported to be experienced by relatively few number of respondents. More than half of the respondents of this study

agreed to having experienced one of the above side effects as a minimum (11) Higgins et al, raised concerns about the safety of consuming energy drinks due to the harmful effects such as anxiety, sleeplessness due to caffeine, heart problems and also death in severe cases (9).

Research article reviewed for consumption habits with regards to energy drinks show that the participants who perceive that it is safe for teenagers to consume energy drinks and also those who believe that energy drinks are a type of sports drink consumed more than once per week (14) A research studying consumption of energy drinks among Korean students shows that 33% percent participants consumed minimum of one energy drink per month. It is alarming to note that though few, there were some students who were habitual to daily consumption and also used energy drinks as a mixer with alcohol. (5) Similarly a US study reported 51% users drinking more than one energy drink per month. It was further revealed that, majority respondents consumed only one drink when they were using it to deal with sleep, studying, long driving periods and to treat hangover but consumed 3 or more energy drinks when mixed with alcohol during parties. (10)

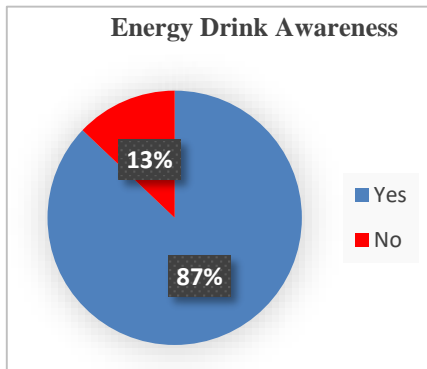
Another study highlighted the risk associated with mixing alcohol and energy drinks which is common amongst youngsters and the resulting increase in binge drinking, poor driving, precarious sexual behavior and increased alcohol dependency (12)

METHOD

A questionnaire was designed to assess awareness of energy drinks and consumption patterns of energy drinks among college students. An online survey using google forms was used to study the awareness of energy drinks among 418 randomly surveyed students from the State of Maharashtra. The next section of the survey was designed to collect data related to consumption habits. Only those respondents among the 418 who have consumed energy drinks proceeded with the questionnaire resulting in a valid data of 316 for consumption habits.

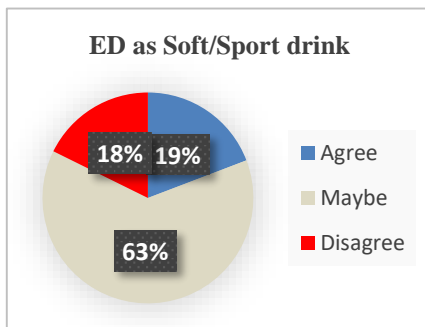
RESULTS & DISCUSSION

Graph 1.1 Proportion of respondent awareness regarding energy drink



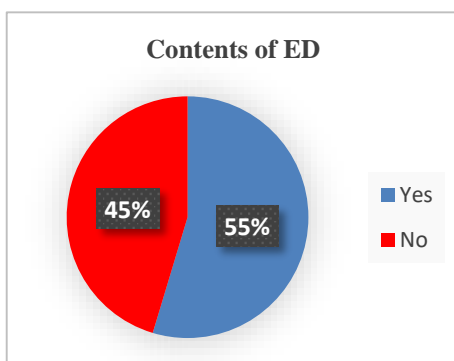
The chart depicts the awareness of respondents regarding energy drinks. Majority of the respondents at 87.1% are aware of energy drinks since the respondents selected for the study are college going students who are very likely to be exposed to EDs. A small proportion of youth 12.9% do not know what energy drinks are.

Graph 1.2 Proportion of respondents thinking that energy drink is a soft drink or sport drink



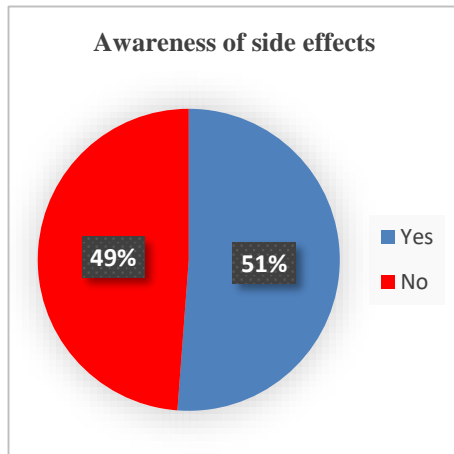
It is observed that most of the respondents at 63 % are unsure whether energy drink is same as a soft drink or sport drink. 19 % respondents think that energy drink is a type of soft drink or sport drink whereas 18 % think understand that energy drink cannot be confused with soft drink or sport drink.

Graph 1.3 Proportion of respondent showing awareness of the contents present in energy drinks



It is seen that 55% are aware that energy drinks contain high amounts of sugar and caffeine as well as many other ingredients to elevate mood and energy, relieve stress and fatigue, improve concentration, add taste and nutritional value. Remaining 45% are unaware about the content present in energy drinks.

Graph 1.4 Proportion of respondent showing awareness of the side effects of consuming energy drinks



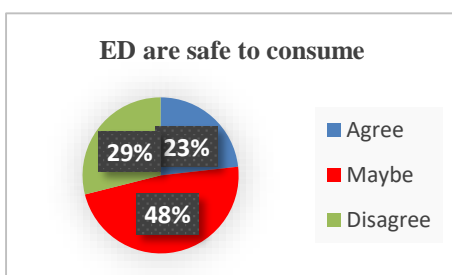
More than half of the respondents, 51.3 % responded that they were aware of the harmful effects of consuming energy drinks whereas 48.7% are unaware of the side effects caused by the consumption of energy drinks. Similarly the other half of the respondents seem to be aware that consuming energy drinks which have a high content of caffeine, sugar, vitamins, antioxidants enhance energy levels and also provide nutritive value but if

consumed in excess can lead to undesirable health complications such as breathing problem, hypertension, dizziness, nausea, vomiting, anxiety and also severe complications in some cases requiring hospitalization. It is therefore assumed that those who are aware of the side effects may not consume energy drinks and limit the intake of energy drinks to avoid any harmful effects on the health.

Respondents comprising of college students who are unaware of the side effects are likely to consume energy drinks indiscriminately.

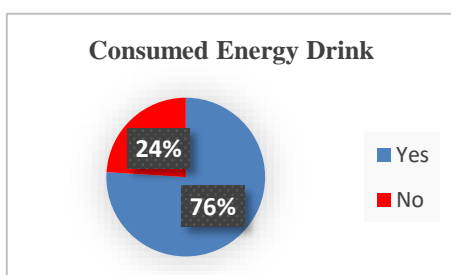
It can be concluded that the respondents who are aware of the contents are likely to be aware of the side effects due to energy drink abuse.

Graph 1.5 Proportion of respondents thinking that energy drinks are safe



Almost 48% respondents are unsure whether energy drinks are safe to consume. 23% of the respondents consider energy drinks to have health benefits and safe to consume whereas 29% consider it unsafe to consume energy drinks.

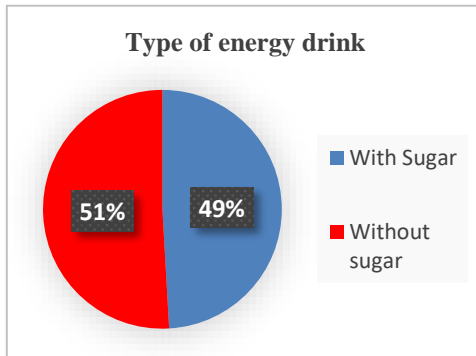
Graph 2.1 Proportion of respondents who have consumed energy drink



It can be inferred that more than 3/4th of the total 418 respondents at 75.6% have consumed energy drinks whereas 1/4th of the respondents at 24.2% of respondents haven't ever consumed energy drinks. Though 87% respondents are aware of energy drinks,

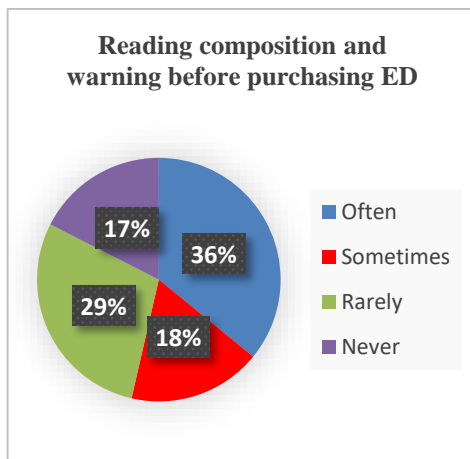
only 75% of them reported to have tried or consumed energy drinks. Thus, not all youngsters who have heard or know about energy drinks have consumed them.

Graph 2.2 Proportion of respondents based on preferred type of energy drink



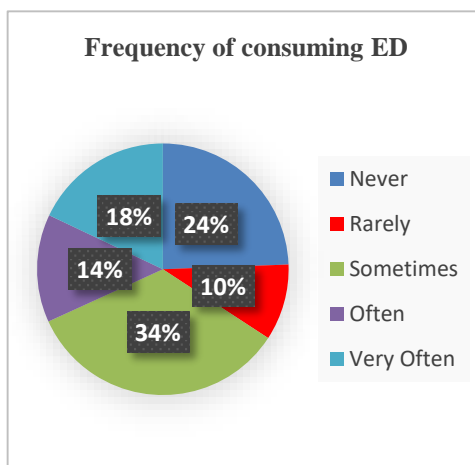
The graph depicts that the respondents are divided in their preference of energy drinks. 50.9% respondents prefer sugarfree energy drinks. They are likely to be weight watchers whereas 49.1% respondents prefers energy drinks containing sugar as they are likely to give preference to taste over other reasons.

Graph 2.3 Proportion of respondents reading composition / warning before purchasing energy drinks

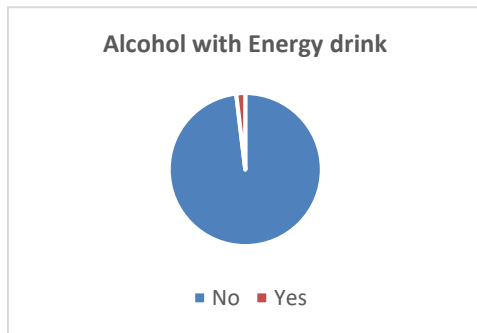


Close to half of the total respondents which is 46 % rarely and never read the warning about health risks usually found in fine print as a regulatory requirement. The remaining half includes 36% respondents who often read instructions and 18 % who read the warning only sometimes. This indicates that almost 54 % respondents choose to consume energy drinks inspite of having read the composition and warning about possible health risks.

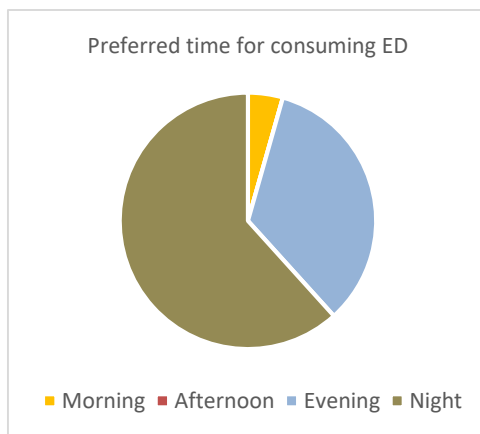
Graph 2.4 Proportion of respondents stating frequency of consuming energy drinks



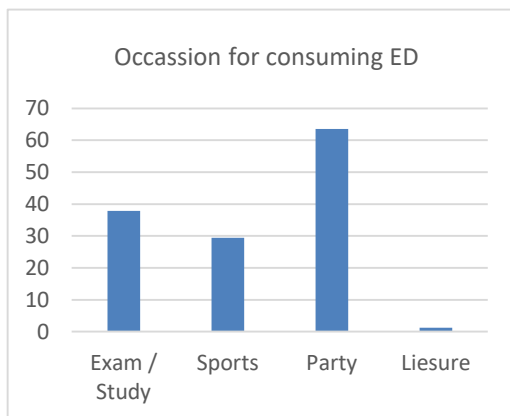
Almost one third of the population, 34% consumes energy drinks Sometimes. Category of Often and Very Often together is at 31.8 % which is alarming and shows that a large number of college students are consuming energy drinks frequently and prone to addiction. Respondents who represent the Sometimes and Rarely category (43.9%) can be said to display responsible behavior in the consumption of energy drinks.

Graph 2.5 Proportion of respondents who mix alcohol with energy drinks

It is observed that mixing alcohol with energy drinks is not very common. Though at a negligible 1.9 %, mixing alcohol with energy drink can be worrisome.

Graph 2.6 Proportion of respondents based on preferred time of consuming energy drinks

Majority of the respondents at 61.7% consume energy drinks at night, almost 34 % prefer to consume energy drinks in the evening very few less than 5 % respondents consume in the morning and no one consumed during the afternoon.

Graph 2.7 Proportion of respondents based on occasion consuming energy drinks

Majority of the respondents consume energy drinks when they celebrating or enjoying at the party. It can be seen that 38% students consume energy drink during exams wherein they need to concentrate and stay awake during the night. Consuming energy drink to improve performance in sports is also observed among 30 % respondents.

CONCLUSION

In conclusion of this research it was found that there is high awareness among 87% respondents regarding energy drinks but only 75% have tried energy drinks and about 65%

are unaware whether energy drink is the same as soft drink or sports drink. 55% respondents are aware of the contents of energy drinks and 52% are aware of the harmful effects of consumption and that if consumed in excess can lead to health complications. There is not much difference in the respondent's preference for energy drinks with sugar or without sugar. 54% respondents choose to consume energy drinks in spite of reading composition and warning about possible health hazards. 44% respondents can be said to display responsible consumption behavior as they rarely or sometimes consume energy drinks. Mixing alcohol is not very common but can be worrisome for the 2 percent respondents who mix alcohol and energy drink. Majority of the respondents consumed energy drinks at night and during parties. Other reasons for consuming energy drinks were when staying awake to study and to improve performance in sports.

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