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## A STUDY ON THE CONSUMPTION OF CAFFEINE IN ADULTS

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Caffeinated products have been one of the most consumed drinks in adults. It is a psychoactive substance and a chemical. The main objectives of this study was to examine the consumption of caffeine and assess the prevalence of consumption of energy drinks in adults. To create an awareness about ill effects of over consumption of caffeine. A cross sectional study designed using a self administered questionnaire was distributed to 100 sample which included students of college and employees. Random sampling method was followed. The results stated that (28%) were overweight. They provided various reasons for consumption such as (42%) like the taste. It was recorded that (55%) respondents caffeine intake was increased from the last year. (52%) of the participants consider themselves addicted to caffeine. Also caffeine showed its effect on their appetite, (50%) didn't feel hungry after caffeine consumption and (26%) had caffeine intolerance. It was concluded that better education is needed on the drawbacks of caffeine consumption to improve and prevent health issues. Efforts had been made to increase the awareness about the ill effects of caffeine overconsumption and the pamphlets were distributed to each containing the information.

**Keywords:** Caffeine, Caffeinated products, Awareness, Consumption, Weight, Health

### INTRODUCTION

Caffeine is extracted on a large scale from the plant *Coffea Arabica*. It is an alkaloid occurring naturally in 60 plant species, from which cocoa beans, kola nuts, tea leaves and coffee beans are commonly known. Other sources of caffeine which are natural include yerba maté, guarana berries, guayusa, and yaupon holly.

Caffeine is most frequently consumed in beverages like coffee, soft drinks, and tea. The market also included other beverages like caffeinated sport drinks, juices, and waters. Other than these beverages, caffeine is also found in cocoa, chocolate, and in a variety of medications such as pain relievers and in some dietary supplements.

Average intake is about 200-300 mg per day. When, consumed in excessive amount (>500 mg) problems occur and these problems usually take the form of an increase in

anxiety. A 75-mg serving of caffeine can increase attention, alertness and memory. Studies has found that lifelong consumption of caffeine may reduce the risk of developing Alzheimer's disease. A high intake of caffeine may worsen symptoms of anxiety and depression. Caffeine leads to depression or depression causes people to consume more caffeine statement remains unclear.

More than 95% water is present in black coffee. Research suggests both benefit and risk of drinking coffee, when taken in moderation contributes to fluid intake and does not lead to dehydration, or significant loss of body fluid and when consumed more it may lead to urinary incontinence.

There is research that unfiltered coffee has the power to increase LDL cholesterol which is bad. Caffeinated sodas and other sugar-sweetened beverages like energy drinks,

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contains large amounts of sugar, which may lead to weight gain when consumed in excess.

It has some physical effects on the human body as it is a chemical, although it does not directly suppress your appetite but may show little suppressing affect on appetite. Some coffee drinkers will feel this gastrointestinal effect as caffeine has bowel-stimulating quality. A research noted the magnitude of this peristaltic effect of coffee is similar to eating a meal, also 60% stronger t effect induced than by drinking water. Apart from improving bowel movements, coffee also cause looser stools because of increased peristalsis.

**METHODOLOGY**

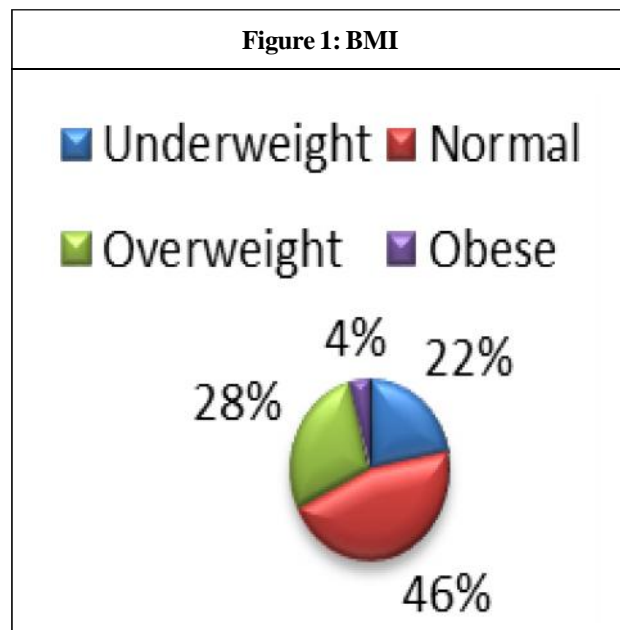
The survey was aimed to study the consumption of caffeine in adults and to create an awareness about its ill effects of over consumption of caffeine.

**Selection of Area:** The area selected for the study were random institutes Sultan ul uloom college of Pharmacy - (Banjara Hills); Anwar-ul-uloom College - (New mallepally) and employees of – Virinchi Hospitals (Banjara Hills) located in Hyderabad.

**Size of the Sample:** The size of the sample was 100, which included both college students + employees of hospital.

**Data Collection**

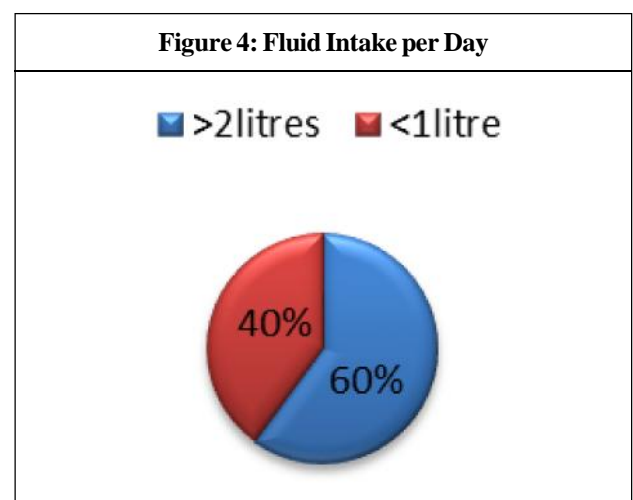
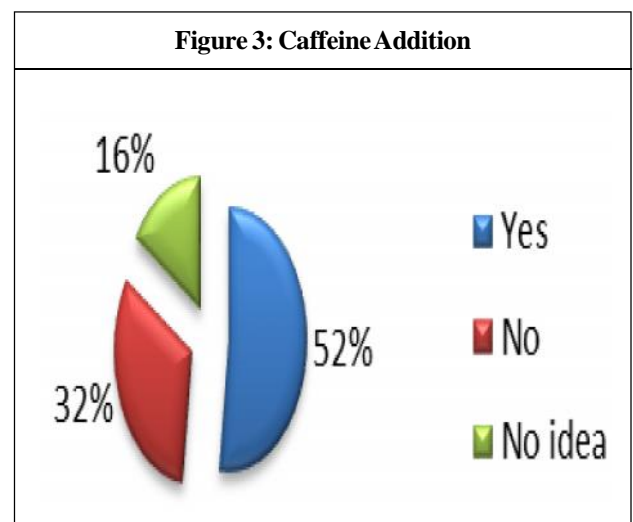
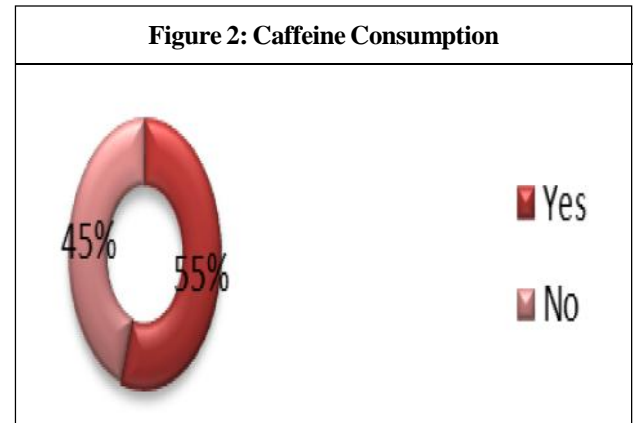
A well formulated pre and self-administered questionnaire was used as tool for the collection of the data.



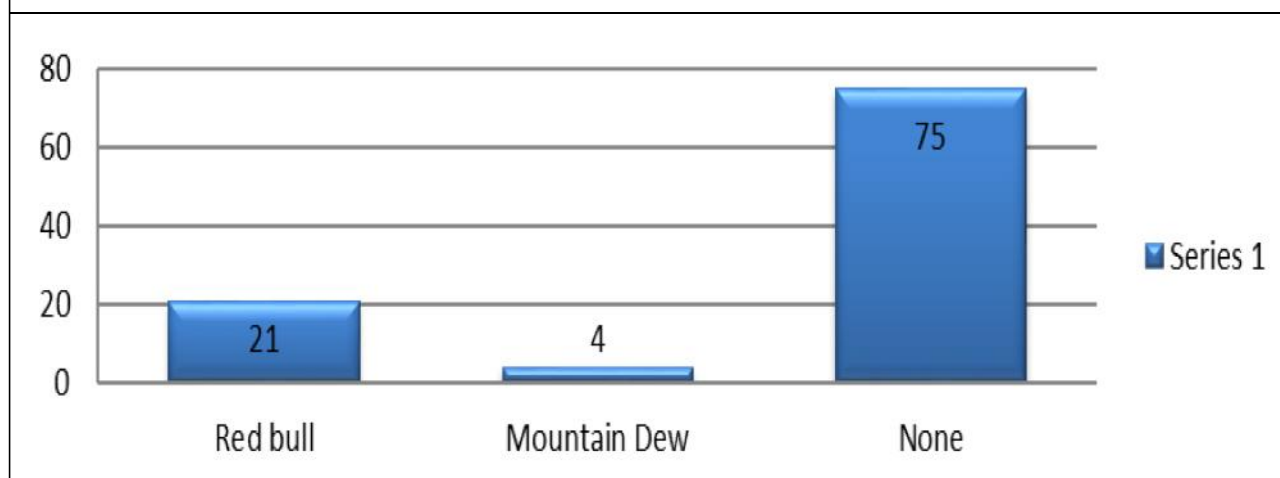
**Period of Study**

January-April 2018.

**Development of the Questionnaire:** A well formulated questionnaire was used which includes the general



**Figure 5: Caffeinated Energy Drinks Commonly Used**



information of the adult person like name, age, address and anthropometric measurements like height, weight. Specific information about the pattern of consumption of caffeinated products during work was included.

### Data Analysis

After collecting the data, it was analyzed. The results were represented in the form of tables, pie charts and bar graphs.

### CONCLUSION

Caffeine is a bitter, crystalline water soluble substance. The sources are coffee, tea, soft drinks, energy drinks, chocolates and ice creams. It is widely consumed psychoactive drug. Caffeine have both positive and negative health effects. A study was conducted on consumption of caffeine in adults which concluded that consumption of caffeine shows symptoms of weight changes in people (as shown in Figure 1). And they consumed anytime they didn't had any specific time to consume caffeinated beverages. It was observed by the participants that caffeine intake was increased from last year (Figure 2). From the survey it was found that reason for consumption was for the taste. Respondents felt addictive to caffeine (Figure 3) and around 59% observed headache as withdrawal symptom. It was observed that caffeine consumers had suppressing affect on their appetite with caffeinated products. Most participants did not consume any energy drink, around 21% preferred red bull (Figure 5) which contains more caffeine than soft drinks according to USDA. From the survey it was found that 26% felt caffeine intolerance sometimes which included symptoms like constipation, diarrhea. Among 100 sample 60% had >2 litre/day and 40% consumed <1 litre per day (Figure 4).

Caffeine has diuretic effects that make you urinate more frequently, hence people who consume more caffeinated products should drink plenty of water regularly which will help in restore of water loss from the body. And prevent conditions like constipation. 13% People were anemic as caffeine reduces iron absorption in body.

Lastly all the participants were educated and awareness has been created regarding hazards of over consumption of caffeine.

### ACKNOWLEDGMENT

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