

Energy Drinks

Introduction

The topic for my fact sheet is about energy drinks. Energy drinks are something that has been very interesting to me for a long time. Obviously, energy drinks are very well advertised and you will always see ads for “Red Bull” or “5-Hour Energy Shots.” But to be honest, I have never really looked in to what they are all about.

I chose this topic because I admit to be quite a frequent user of energy drinks. I tend to have an energy drink nearly every single morning. My drink of choice is “Red Bull.” Being spotted every day with an energy drink, people always tend to tell me how bad it is and how unhealthy it is to be drinking them daily. To me, it is just a part of my daily routine and they get me up and going in the morning. Since I am an athlete here on campus as well, it interests me on what effects it may have on my performance. So, when I saw this topic pop up on the list, it was a no-brainer that I wanted to research the topic and dangers of energy drinks. Now, I could finally see for myself what kind of dangers come from these drinks.

Also, being in college I come across a lot of alcohol-related issues. It’s no secret that almost everyone in college drinks. But recently, energy drinks have been tied to alcohol in a relationship. It is very popular these days to drink alcohol accompanied by energy drinks. Since they are cheap and tend to get you drunk faster, they are very popular among college campuses throughout the entire country. Everyone seems to come to the conclusion that it is terrible for you, but I want to see for myself what are the immediate effects related to alcohol and energy drinks when combined.

Section 1: Background and Problem Statement

Energy drinks are more popular than they have ever been. They are marketed brilliantly, and are told to give you a good pick-me-up. But no one knows the true problems with these beverages. One of the main issues is young people being misled about these drinks. Most of these have very appealing names (Monster, Rock Star, Nitro, Red Bull, etc.) and it makes most kids want to buy them. The availability of these beverages make them often consumed. Kids will take them before sporting events and to wake them up in the mornings.

More important than these issues is the health and nutrition portion of it. Energy drinks contain loads of ingredients that are mostly unheard of. Taurine, guarana, and caffeine are among the most common in these beverages. These pose a huge risk on your nutrition and weight management. The calories in these drinks are also through the roof. So the main problem in these beverages affects your health.

Finally, an ongoing addition to energy drinks has been the mixture with alcoholic beverages. It is quite a new trend to mix your favorite energy drink with alcohol. There are even products sold with the two together (Four Loko). The combination of the stimulant from the energy drink and the depression from the alcohol can lead to terrible health issues, even death.

- **Web site #1 Name:** Healthy People 2020 “Nutrition and Weight Status”
- **Web address:** <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=29>

- **Background Information:**

Healthy People 2020 did not have any information regarding energy drinks anywhere on their Web site. However, they do have Nutrition and Weight Status as one of the goals. This falls right in to the category regarding consumption of energy drinks. The goal is basically to reduce health risks and to maintain a healthy weight through a steady diet. Some of the objectives really stood out to me because they relate right back to consuming energy drinks. One of the objectives was to limit caloric intake and to avoid added sugars and sodium. A regular 8-oz can of soda has roughly 120 calories per can. Since most energy drinks are sold in 14-20 oz cans, you can double and nearly triple the amount of calories. Gathering the information to relate to energy drinks was very difficult to do on Healthy People 2020, but there is no doubt that these drinks play a major role in the nutrition and weight of people.

- **Web site #2 Name:** Marshfield Clinic

- **Web address:**

http://www.marshfieldclinic.org/patients/?page=cattails_2007_marapr_energydrinks

- **Background Information:**

The Marshfield Clinic is one of the largest, private owned, group practices in the United States. There are over 1,200 hospitals, clinics, and other sites that are part of the program. They are dedicated to research. Thankfully, they have a very good amount of information regarding nutritional risks directly from consumption of energy drinks. They claim that energy drink consumption is just using all the wrong ways to try to achieve vitamin and energy intake. There are many more healthy and safer ways to get to these levels. Most of them are simply just eating better meals. The Web site describes it as a huge public problem. The Marshfield Clinic defines energy drinks as misleading ways to gain energy with “Cooler Names.” It is a very respected organization and a reliable source of information.

- **Web site #3 Name:** WebMD

- **Web address:** <http://www.webmd.com/mental-health/news/20101115/energy-drinks-may-raise-risk-for-alcohol-problems>

- **Background Information:**

WebMD is one of the leading Web sites on health in the world. They are dedicated to providing you with reliable health information on thousands of topics. It seems you could search almost any health related issue on WebMD and find information. On energy drinks, it is shown that the more you drink them, the more likely you are to develop alcohol problems. It talks about how one of the most recent college trends is mixing alcohol with a highly-caffeinated energy drink. The trend is also extremely unhealthy for your weight. Since alcohol and energy drinks both contain a lot of calories, your risk for weight gain is extremely high in this trend

Section 2: Research

- **Web site #1 Name:** Pub Med

- **Web address:** <http://www.ncbi.nlm.nih.gov/pubmed/21321035>

- **Summary of the research**

The research here I found on Pub Med. It is a research study on the effects of energy drinks on children, adolescents, and young adults. There are a ton of very interesting results from this study. According to surveys, 30-50% of adolescents and young adults consume energy drinks. Of the 5448 caffeine overdoses that occurred in the US in 2007, 46% of these were people under the age of 19 years old. They found out that there is no therapeutic benefit of drinking energy drinks and they should be consumed using proper research.

- **Web site #2 Name:** iowa.gov (from Google Scholar Search)
- **Web address:**
http://iowa.gov/government/ag/latest_news/releases/june_2008/AnheuseR_Busch_OBRIEN_STUDY.pdf
- **Summary of the research:**
This was a study between energy drinks in relation to alcohol consequences, and high-risk of drinking behavior. It was a web-based survey of 4,721 college students from 10 different universities in North Carolina. The results were quite stunning. Out of the 4,721 students, 24% admitted to have mixed alcohol with energy drinks in the past 30 days. Students who took part in that also admitted to drink alcohol between 3-6 days a week. Also, there was admittance of drunkenness 1-2 days a week. The research showed that these people had higher risk of being taken advantage of sexually, driving under the influence, and also riding with an intoxicated driver. So, basically energy drinks in relation with alcohol can lead to more alcohol related issues.

- **Web site #3 Name:** Pub Med
- **Web address:** <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2562885/>
- **Summary of the research:**
I also found this next research article on Pub Med. This has to do with energy drinks relating to athletes or “Jocks.” The point of the survey was to do analysis on jocks, risk takers, masculine norms, etc. Out of the 795 surveyed, 40% admitted to have had an energy drink within the past month. The relationship was based on masculine norms. So basically, energy drinks are said to be consumed by mostly athletes or risk takers. It shows that people who consume these beverages have a high risk for bad health or bad decision making. It also shows that most athletes are the people to do most of the consuming.

Section 3: Statistics

- **Web site #1 Name:** Caffeine Content in Energy Drinks
- **Web address:** <http://www.mayoclinic.com/health/caffeine/AN01211>
- **Summary of the statistics:**
I came across this statistic on the Mayo Clinic Web site. Caffeine is the main ingredient in these drinks, and the content is mind boggling. Caffeine is something that has to do with the un-healthy weight issue in these drinks. Caffeine tends to give the “jitters”

which makes you very jumpy, shaky, and nervous. Side effects of that would be a huge appetite loss, therefore losing an un-healthy amount of weight. The top most concentrated with caffeine are Monster Energy and Full Throttle. Monster has a whopping 160 milligrams of caffeine in a 16 oz can. Full Throttle is not far behind with 140 milligrams. The most unbelievable statistic shown was from the recently banned drink “Cocaine.” This drink had 280 milligrams in just an 8.4 oz can! Thankfully some drinks like this are being banned and helping get rid of this problem.

- **Web site #2 Name:** Web MD
- **Web address:** <http://www.webmd.com/mental-health/news/20101115/energy-drinks-may-raise-risk-for-alcohol-problems>
- **Summary of the statistics:**
WebMD has, hands down, some of the best statistics regarding these beverages. Although the article talks about alcohol, my statistic has nothing to do with alcohol. My statistic has to do with who and where energy drinks affect the most. Hands down, college students are the most frequent users of these drinks. They are used to stay up long hours to study, to wake up a little easier, and to get the flow going. The statistic says that more than 60% of college students have had an energy drink in the past year! Considering the number of college students, that is amazing. In that same survey it reads that 10.1% have them weekly, and 3 % have them daily.
- **Web site #3: CDC**
- **Web address:** <http://www.cdc.gov/alcohol/fact-sheets/cab.htm>
- **Summary of the statistics:**
The CDC Web site is one of the most respected in the country. This contains statistics about energy drinks in alcoholic beverages. Something interesting to me was that in most alcoholic beverages containing energy drinks, they do not report how much alcohol content is in it. If you look at a beer can, it usually says what percentage of alcohol is in it. It says that beer is 4-5% alcohol and these caffeinated alcoholic beverages are 6-12%, which is much greater than that in beer. If you look on one of these beverages, you don't usually find how much alcohol content is in it, I found that very interesting and a little disturbing. I think that is a reason that so many people are being harmed by these beverages because they do not know how much alcohol is really in them.

Section 4: Consumer Information

- **Web site #1 Name: Kids Health**
- **Web address:** http://kidshealth.org/teen/food_fitness/nutrition/energy.html#
- **Summary of the information:**
Coming across Kids Health, I did not expect to find a lot of new information. But, thankfully I came across some very interesting facts. Energy drinks aren't all they are hyped up to be. In fact, other than the excessive caffeine that causes jitteriness, sleep problems, and weight issues, it contains numerous ingredients that nobody knows about. Things like guarana and taurine are ingredients that have mysterious side effects. In fact, these ingredients have not even been tested! Some contain supplements that are not even regulated by the FDA, including a popular ingredient called ginseng.

- **Web site #2 Name: Energy Drinks: A growing Problem**
- **Web address:** <http://www.ncbi.nlm.nih.gov/pubmed/18809264>
- **Summary of the information:**
The article on energy drinks here describes the economic portion of them and the amount of money being made off of them. Just from 2002-2006, the money industry in the United States from energy drinks has grown drastically. In 2002, the sales were just over 1 million dollars. Within 4 years, it had exploded to 6.5 million dollars! The availability of these drinks is something that makes them so popular. It is very simple to consume so much of these unhealthy drinks because they are nearly sold everywhere.
- **Web site #3 Name: Medline Plus**
- **Web address:** http://www.nlm.nih.gov/medlineplus/news/fullstory_108794.html
- **Summary of the information:**
This article I found on Medline Plus gave me new statistics that I have not yet heard. It is very difficult to research this topic and find reliable statistics; thankfully Medline Plus gave me a couple of good ones. The article, which was recently written a month ago, explains how harmful energy drinks could be to kids. The caffeine in it is substantially more than in regular soft drinks. Mountain Dew contains the most caffeine as a soda, with 28 milligrams of caffeine in an 8 oz serving. A regular 8 oz serving of red bull nearly triples it with 77 milligrams of caffeine! In fact, it is not even legal according to FDA. According to FDA, you are only supposed to have 71 milligrams maximum of caffeine, but most companies get away with it claiming that their product is “natural.”

Section 5: Solutions to the Problem (or Issue)

- **Web site #1 Name: CDC**
- **Web address:** <http://www.cdc.gov/Features/CollegeHealth/>
- **Summary of the information:**
The CDC (Centers for Disease Control) is one of the major components in health services in the country. The main goal of the CDC is to inform people and communities that they need to protect their health. They do this using health promotion. The CDC likes to monitor health, detect and investigate health problems, and also inform people on prevention strategies. This particular article was about health in college. Among energy drink consumers, college students are the ones most likely to drink them. They are so popular around college in hope to give them an extra jolt of energy. But when it comes down to it, there are much healthier ways to gain energy. The article simply states that improving sleeping habits and eating healthier give you the same amount of energy, except more widespread. Energy drinks provide a short burst of energy, usually resulting in a crash. But with more sleep and better eating, you should have enough energy to make it through the day without any problems.
- **Web site #2 Name: Med Page Today**
- **Web address:** <http://www.medpagetoday.com/PublicHealthPolicy/PublicHealth/23434>
- **Summary of the information:**

Med Page Today is a great site that many physicians use. It is a great source for medical news and very informative. The main goal of Med Page Today is to make sure that they provide up to date information and analysis for physicians and patients. They make sure that the patients understand with clear analysis, and the Web site does a great job informing what to do. This article regards alcoholic energy drinks. The article reports that the sales of alcoholic energy drinks will be banned. This is possibly the easiest solution to any problem. By simply banning the product, people will not be able to get their hands on these dangerous mixtures that cause many health dangers. Med Page Today does a very good job informing people and they do give up to date breaking news. This article was posted the day after it was reported. The drink being banned is FourLoko, which is sold in 23 oz cans and contain 12% alcohol by volume. There are reports a people dying after drinking these on top of diet pills. Reportedly, the drink caused someone to behave so erratically that he shot himself. So the FDA decided to simply solve the problem by banning the entire substance.

- **Web site #3 Name: Med Page Today**
- **Web address:** <http://www.medpagetoday.com/Pediatrics/GeneralPediatrics/24856>
- **Summary of the information:**
Finding reliable sources on energy drinks again is very difficult, so I turned back to a reliable Web site that I have already used; MedPage Today. This article is one of the more in-depth articles I have come across with a lot of facts. They do not necessarily offer solutions, but you can make them out for yourself. Publically, these drinks are being sold so much and expected to reach 9 billion dollars by late 2011. Bottom line is that they are not healthy for you. Energy drinks are okay to drink in moderation, but in excess is very risky to your health. So, the best solution offered here is to not drink them. The best thing to do is just eat healthy and sleep better.

Conclusions

In conclusion, researching this topic over the past few days has taught me so much about energy drinks and what is actually happening to my body when I drink them. I thought it was perfectly normal to wake up every day, grab my Red Bull, and head out to my 8 AM class every morning. Come to think of it one of the reasons why I drink so much Red Bull is because of my lack of sleep. Since I have such a hard time sleeping sometimes, I thought it was perfectly acceptable to drink so much. There will be nights I will think it's alright to be up so late because I know in the morning I will just grab my drink and be awake and ready to go. For people my age group it is a huge issue. I was not aware that more than half of people who consume energy drinks are under the age of 19. Something that stood up and startled me quite a bit was that more than half of caffeine overdoses happen to kids around my age. To me this is kind of a wake up call that I need to start taking better care of myself. I need to eat better foods to keep me going all day. Being an athlete, it is difficult to get through a full day of school, practice, games, and homework without being energized. So the better I eat and sleep, the better off I will be without energy drinks.

I also learned about how dangerous caffeinated alcoholic beverages are. I am around them all the time in a college setting, and the number of people who partake in drinking these types of beverages is startling. Over 60% of college kids in a survey would drink caffeinated

alcoholic beverages at least once. After all the research, it is clear that I will never drink one of these. After researching reports of people dying and killing themselves while under the influence of these is scary enough to think about. So overall, I am glad I chose to research this and am much more aware of how to properly energize myself.

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