

# The Hazards Of Energy Drinks

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# What Are Energy Drinks?

- Energy drinks are beverages that contain caffeine, taurine, vitamins, herbal supplements and sugar or sweeteners.
- They are marketed to improve energy, weight loss, stamina, athletic performance and concentration.
- They are not the same as sports drinks and vitamin waters.
- Energy drinks are available in over 140 countries.
- They are the fastest U.S. growing beverage market, sales have grown more than 700% since 2000.

# What Do Energy Drinks Look Like?



# What Is So Bad About energy Drinks?

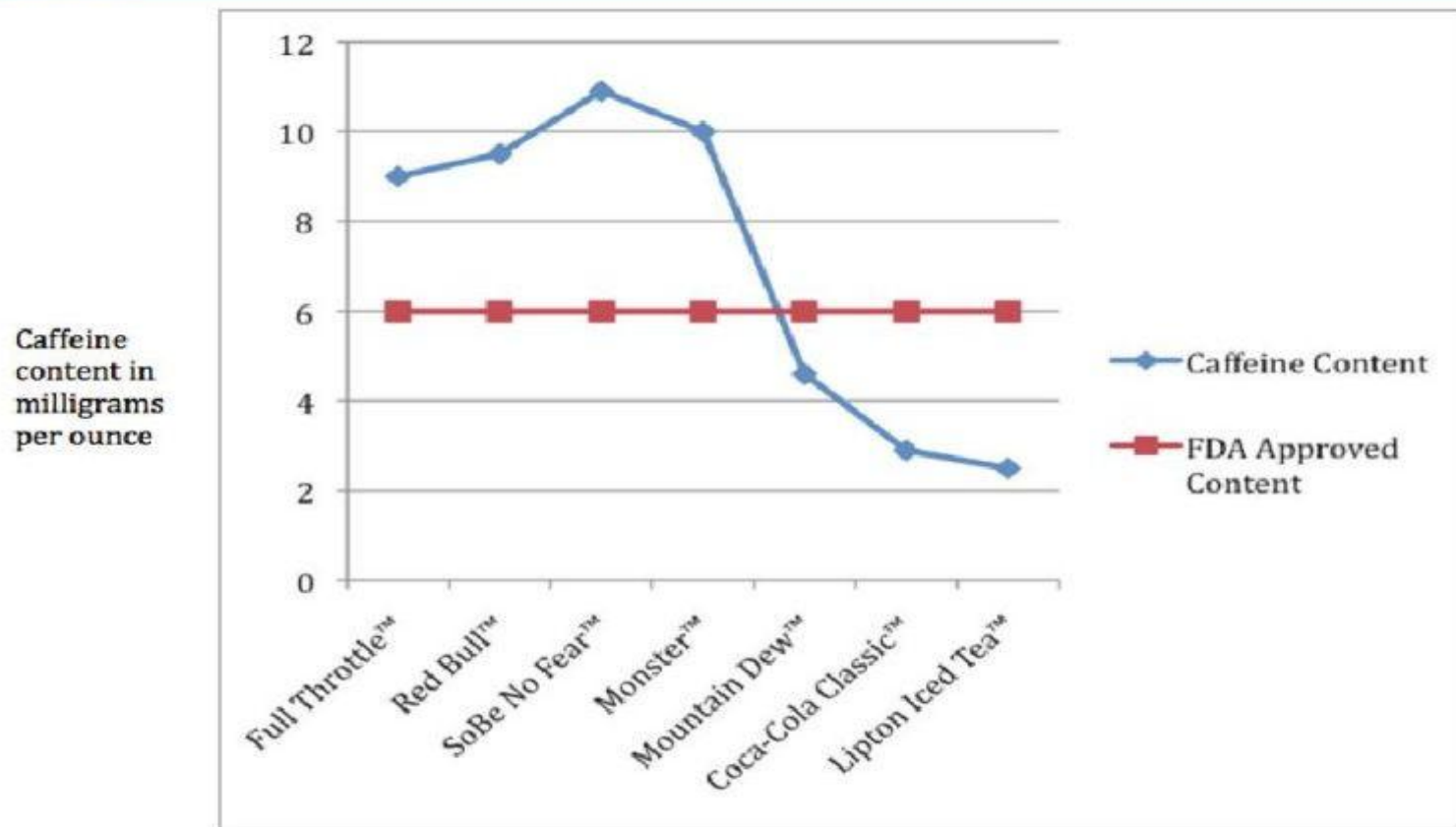
- Energy drinks are categorized as nutritional supplements and are therefore not regulated by the FDA.
- The amounts of caffeine in these drinks way exceeds the amounts of caffeine allowed in other drinks.
- The other “natural” ingredients that energy drinks contain also may contain other types of stimulants similar to caffeine.

# What is So Bad About Energy Drinks

- Energy drinks may encourage risky behavior in youth that drink them.
- There are no proven health benefits of drinking energy drinks.
- They may contain mega doses of vitamins well above dietary recommendations
- Powerful herbal stimulants used in some energy drinks can be more potent than caffeine. Redline and Spike are two examples

# Caffeine Content of Energy drinks vs. caffeinated beverages that are FDA approved

Medscape



Commercially Caffeinated Beverages

# Who Is most Likely To Drink Them?

- Half of the energy drink market consists of children (< 12 years old), adolescents (12-18 years old), and young adults (19-25 years old).
- One study found 28% of 12 to 14 year olds, 31% of 12 to 17 year olds, and 34% of 18 to 24 year olds reported regularly consuming energy drinks.
- Important to note of the 5448 U.S. caffeine overdoses reported in 2007, 46% occurred in those younger than 19 years of age.

# Who drinks them?

- Students use them to stay up all night cramming for exams.
- Young people in high school and college drink them to stay out late partying.
- Athletes use them to improve performance.
- The “natural” ingredients may appeal to adults seeking a “healthy” energy kick.

# Marketing Strategies

- Energy drinks are marketed as a way to improve energy, weight loss, stamina, athletic performance and concentration.
- Youth targeted marketing strategies date back to 1987. This youth aimed marketing along with risk taking adolescent tendencies combine to increase over dose potential. Its legal and dangerous effects help to fuel its popularity with youth.

# Marketing Strategies

- Energy drinks are being aggressively marketed to young people as an aid for school, socializing or sports.
- Marketing strategies include sporting event and athlete sponsorships (motocross and NASCAR), alcohol alternative promotion and product placement in the media (face book and video games) oriented to youth. The logos are everywhere- hats, t-shirts, etc.

# What Effect Do They Have On Children And Young Adults?

- Caffeine is a drug that stimulates the central nervous system.
- It causes an increase in heart rate, increased alertness, it affects the body's ability to regulate temperature and is a diuretic.
- Too Much caffeine can cause nausea, vomiting, dehydration, anxiety, sleep disturbances, elevated blood pressure and heart palpitations.
- Caffeine overdose can cause seizures, delirium, stroke and serious cardiac arrhythmias.
- Taurine, an additive in the drinks can also elevate blood pressure and heart rate.
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# Effect on Children and Teens

- These drinks are typically used just before sports events to enhance performance
- Large amounts of caffeine can have very serious consequences in people who are caffeine naïve.
- Teens may not realize how the caffeine will affect them and have the “if one is good, more is better” attitude.
- There have been reports of young healthy athletes who have experienced severe cardiac arrhythmias believed to be the result of energy drinks.

# Affect on children and Teens

- The use of Energy drinks can have even more serious consequences for those children that have ADHD, eating disorders, diabetes and cardiac conditions.
- The combined effects of energy drinks and prescription medications are unknown.
- Energy drinks may prevent bone mineralization in youth.

# Energy Drinks And Alcohol Use

- The practice of mixing energy drinks with alcohol is wide spread.
- Mixing energy drinks with alcohol has been linked to drinking more alcohol during a drinking session as well as serious alcohol related consequences such as sexual assault and driving while intoxicated.

# Energy Drinks and Alcohol

- Individuals who combine energy drinks with alcohol underestimate their level of impairment.
- Combining alcohol and energy drinks can prolong drinking sessions by keeping the individual awake longer.
- Recent research suggests that energy drink use may confer a risk for alcohol dependence and possible non-medical prescription drug use.

# How You Can Raise Awareness

- Promote awareness of the potential risk of energy drinks.
- Work with schools, athletic groups, and other community partners to get the message out.
- Screening by health providers for energy drink consumption both alone or with alcohol, especially for athletes, children with high risk behaviors, certain health conditions and children with behavioral changes, anxiety, poor nutrition or sleep disturbances.

# Raise Awareness

- More research is needed to establish safety of these drinks.
- Regulations and restrictions should be placed such as specific labeling with warnings about the risks associated with caffeine consumption in children and adolescents as well as specific risks of mixing energy drinks with alcohol.
- Remember energy drinks have no therapeutic benefit.
- For young people and families seeking increased energy let's not forget the tried and true healthier message- a balanced diet, regular exercise and adequate sleep.

# Resources

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- Amelia M. Arria, Mary Claire O'Brien The "High" Risk of Energy Drinks. *JAMA*. 2011;305(6):600-601. Published online January 25, 2011.
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# Resources

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- Hitt, E Energy Drinks Pose Serious Health risks for Young People Medscape Medical News, E (February 14, 2011). retrieved 04/09/2011  
[http://www.medscape.com/viewarticle/737311\\_print](http://www.medscape.com/viewarticle/737311_print)

# Resources

- Fryhofer,,S.A. Caffeinated energy: Drinks With Dangers. Medscape.com. (03/24/2011). Retrieved 04/09/2011 from <http://www.medscape.com/viewarticle/739233>