

What's All The Buzz About??

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Caffeine

- ✓ *Extracted from the raw fruit of over 60 species of coffee plants. Also extracted from tea, kola nuts and cocoa. It is the main byproduct of guarana*
- ✓ **Use:**
 1. **Strong cardiovascular stimulant**
 2. **Pain reliever**





Caffeine continued...

- ✓ Most widely used psychoactive substance in the world and the only one that is currently legal!
- ✓ Currently, youth are consuming more caffeine than adults on a milligram per kilogram basis



Caffeine continued...

- ✓ FDA limits caffeine in soft drinks to 0.02 percent (10mg/oz.) but there are no limits for ED's
- ✓ Most ED's exceed the soft drink restriction, with caffeine amounts nearly 9-28mg/oz.
- ✓ Children should consume no more than 150mg per day
- ✓ Chocolate=5-20mg

Caffeine continued...

- ✓ Lethal dose in humans approximately 10gm, however death has been reported at 6.5mg
- ✓ Well absorbed with 99% of absorption occurring in the GI tract.
- ✓ Easily distributed throughout the body, and crosses the blood-brain barrier
- ✓ Children may experience more pronounced effects due to slower drug metabolism

Caffeine continued...

✓ In 1993, a Canadian study showed:

25.3% of children aged 11-18 admitted to caffeine doping to enhance sport performance.

37.4% of 16-18 year olds admitted to caffeine doping to enhance sport performance



Catchy Names...

✓ **5 hour energy**

✓ **Kick Start**

✓ **6 hour energy**

✓ **Battery Energy**

✓ **Redbull Shot**

✓ **Full Throttle**

✓ **Monster**

✓ **Rip It**

✓ **Hit Man**

✓ **Stacker 2**

✓ **PimpJuice**

✓ **Nirtro 2 go**

✓ **Red Devil**

✓ **Redline**

✓ **Rockstar**

✓ **Vital 4 U**

✓ **BAWLS**

✓ **SoBe**

Advertised to...





Social Media





References

- Bramstedt, K. (2007). Caffeine use by children: the quest for enhancement. *Information Healthcare, 42*, 1237-1251. doi: 10.1080/10826080701208962
- Burton, D. (n.d.). <http://voices.yahoo.com/excessive-energy-drink-usage-teenagers-insight-12106422.html?cat=5>. http://www.huffingtonpost.com/2012/07/25/florida-school-board-vote_n_1702172.html. (2012).
- Campbell, B., Wilborn, C., La Bounty, P., Taylor, L., Nelson, M., Greenwood, M., Ziegenfuss, T., & Ziegenfuss, T. (2013). International society of sports nutrition position stand: energy drinks. *Journal of the International Society of Sports Nutrition, 10*, 1-16. Retrieved from www.jisn.com
- Committee on Nutrition and the Council on Sports Medicine and Fitness. (2011). Sports drinks and energy drinks for children and adolescents: Are they appropriate? *Pediatrics, 127*, 1182-1189. doi: 10.1542/peds.2011-0965
- Crane, C. (2009). Energy overload. *Scholastic Choices, 24*(4), 22-25.
- Finnegan, D. (2003). The health effects of stimulant drinks. *British Nutrition Foundation, 28*, 147-155.
- Galemore, C. (2011). Sports drinks and energy drinks for children and adolescents- are they appropriate?: A summary of the clinical report. *NASN School Nurse, 26*(320). doi: 10.1177/1942602X11417310
- Healthy People 2020. (2013). Retrieved from <http://www.healthypeople.gov/2020/default.aspx>**