Energy Drink Epidemic

Marketing Strategies

In the US, the energy drink and shot industry grew 60% between 2008-2012 and was worth $12.5 billion in 2012. Sales are projected to reach $21.5 billion by 2017. These enormous sales numbers are due to the effective marketing strategies geared toward adolescents. Companies use different strategies to attract the young consumer. Cans and bottles usually consist of colorful graphics and catchy names. Commercials are placed on television networks including MTV, MTV2, Adult Swim and Comedy Central that are predominantly viewed by adolescents. Extreme sports competitions such as the X Games are mostly watched by the young population and therefore are heavily sponsored by energy drink companies. These companies also sponsor the athletes. Young consumers see their favorite athlete drinking and promoting an energy drink and want to imitate their favorite superstar athletes by acting, dressing and drinking just like their idol. They do this to try to live their idol’s lifestyle and maybe one day walk in their shoes. A recent study showed that in 2010 adolescents saw an average of 124 television ads for energy drinks/shots and 122 soda ads. The same study also showed that children between the ages of 2-11 saw almost the same amount of 5-Hour Energy commercials as they saw Capri Sun fruit drink commercials.

Retailers use product placement to encourage the sale of energy drinks and shots. Placing energy drinks in coolers near sodas, juices, alcohols and water makes the consumer believe that these products are not harmful. This also leads the consumer to believe that energy drinks should be mixed with sodas and alcohol. 5-Hour Energy shots sell so well that they are placed near the checkout area. Overexposure to these products keeps the consumer interested. Energy drink companies deny that they mainly target the youth population when advertising; however, statistics, reports and studies show otherwise.
Labeling and Ingredients

The energy drink industry uses different strategies in order to avoid putting information about the ingredients and their health risks on the can. This leads to inconsistent labeling. Companies that label their products as beverages have to comply with the Nutrition Labeling and Education Act of 1990 (NLEA). Other companies label their drinks as dietary supplements and have to comply with the more lenient Dietary Supplement Health and Education act of 1994 (DSHEA). For example, if there are no macronutrients in a product, the manufacturer may choose not to include them on the label. By doing this, the label will not have a zero amount of a certain ingredient appear on the product. On the other hand, there are ingredients on the label that do not disclose the total amount contained in the drink. Companies are not required to show how much caffeine exists in these drinks. So while people may see that the drink contains caffeine, they have to contact the company directly to find out the exact amount. The ingredients in energy drinks focus on stimulating the body and making the consumer feel more alert and awake. Companies use different ingredients, but the following are the most common:

- **Caffeine** binds to cell membranes in place of adenosine, an inhibitory transmitter causing changes in normal physiological processes. Caffeine consumption increases body temperature, gastric secretion, speech rate, motor activity, attentiveness, blood pressure and heart rate. Consuming caffeine on a daily basis can lead to addiction and dependence. It can also have different effects depending on the person’s characteristics. Studies show that caffeine in controlled, small amounts can have positive effects on adults; however, there is limited information on the effects of caffeine on adolescents and youth. Studies suggest that it is acceptable for healthy adults to consume less than 200 milligrams (mg) of caffeine daily. Teens should consume less than 100mg. Children under the age of 12 should limit their intake completely because they are still growing.

- **Guarana** contains 40mg of caffeine per gram and acts as a stimulant. It is problematic for youth because it increases the amount of caffeine even though it is recognized as a safe ingredient. Consuming a small amount is considered safe for adults, but the exact safe amount is unknown. Guarana has the same effects and risks as caffeine.

- **Taurine** is advertised as an amino acid that helps with cell metabolism and improves athletic performance. These claims are shown to be false and no benefits were revealed by a Mayo Clinic study. It is a building block for protein and can be manufactured by the body. Children and teenagers should avoid energy drinks and shots that contain amino acids.

What’s Really In That Energy Drink

Claims like this aren’t even evaluated by the FDA. Watch out for other misleading labels like, “Energizes and hydrates the body,” “50 percent more focus,” and “Stimulates metabolism.”

Many energy products contain multiple servings per can—even though you can’t resell it to save some for later.

Some energy drinks pack double the sugar of sodas.

This is an amino acid that hasn’t been approved as a food additive by the FDA—energy drink companies just decided it’s safe on their own.

New research from the Cleveland Clinic shows that this compound, also found in red meat, may clog arteries.

The FDA just warned that this ingredient, found in some energy drinks, should be avoided at all costs and removed from the marketplace (it’s been linked to cardiovascular problems).

The FDA doesn’t force energy drinks to list the caffeine content—so some don’t, even though many contain more than 71mg of caffeine per 12 ounces. The amount the FDA has recognized as safe for sodas.

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• *Panax ginseng* is thought to improve athletic performance, but it is not recognized as a safe ingredient for youth. It is considered safe for adult use lasting less than 3 months. Prolonged use can interfere with hormonal balance and have harmful effects. Other side effects include insomnia, increased heart rate, changes in blood pressure, interference with blood clotting and menstrual problems.

• *Sodium* is important in maintaining electrolyte balance after sweating. Energy drinks have 3 times more sodium than soda per 8 ounces. This is too much for the body, especially for youth, and can lead to high blood pressure, increased risk for cardiovascular disease and stroke.

• *Sugar and artificial sweeteners* are present in energy drinks and shots. The amount of sugar in sodas and fruit drinks is very similar to the amount of sugar in energy drinks. Artificial sweeteners are also present in these drinks. Companies avoid classifying drinks with artificial sweeteners as diet products, which would usually alert the consumers of these sweeteners. Sugar consumption increases the risk for dental complications, weight gain, obesity, diabetes, and heart disease. In comparison, a 16 oz. can of a popular energy drink has about the same amount of sugar as 6 donuts combined. Sugar should be consumed in small amounts to avoid a “sugar rush” and a crashing feeling afterwards.

It is important to know what the body needs before, during and after exercise. Energy drinks are consumed in an attempt to replenish the body of lost nutrients, but in most cases, the energy drinks contain too much of what is needed. Consuming these ingredients in moderation will help decrease the risk for associated complications.

Ingredients not recognized as safe should only be consumed if prescribed or suggested by a doctor or health professional. Currently, there are no bans on energy drinks in the United States. Countries around the world such as Australia and Turkey have banned highly caffeinated energy drinks, while Denmark banned energy drinks all together. Legislation in the U.S. has been proposed to ban the sale of highly caffeinated drinks to children under 18 years of age, but these were unsuccessful. State and local government can issue age requirements for the purchase of highly caffeinated energy drinks. The Food and Drug Administration (FDA) regulates what information is put on the product.
Many health risks arise from the consumption of energy drinks, especially for the young consumer. The main issue is due to the large amount of caffeine in these drinks. In 2007, there were 5,488 cases of caffeine overdose in the US. Forty-six percent of those cases occurred in individuals under 19 years of age. Drinking too much caffeine, especially if the individual does not consume large amounts of caffeine on a regular basis, can have rapid cardiovascular effects. Caffeine causes heart rate and blood pressure to increase. This in turn can lead to irregular heart activity, seizures, diabetes, mood and behavioral disorders, sleep disturbances, caffeine dependence and withdrawal. Genetic factors also determine if an individual is at a greater risk for complications with the consumption of caffeine. Caffeine is also a diuretic and may lead to dehydration. It is important to stay well hydrated and not consume large amounts of caffeine before or during exercise. The combination of altered cardiovascular activity along with dehydration may lead to many complications and even death. It is also important not to mix energy drinks/shots with medications or alcohol.

Sugar in energy drinks can lead to a variety of health problems. A diet high in sugar can overwork the pancreas, which generates insulin to balance sugar intake, and makes the individual more susceptible to diabetes. Sugar also makes blood very thick and sticky, preventing it from flowing in small capillaries that supply the gums and teeth with nutrients. Teens consuming about 2,000 daily calories should limit their daily sugar intake to 20-32 grams (5-8 teaspoons). It is important to consume natural sugars found in fruits, vegetables and dairy, while avoiding added sugars found in foods such as desserts, sodas and energy drinks. Main complications from energy drink consumption develop because of the high concentration of different ingredients that act to stimulate the body and mind.

The ingredients in energy drinks all have specific effects and can affect a person differently, depending on their characteristics. Try to avoid energy drinks and shots if possible. Focus on trying to get enough sleep, proper nutrition and exercise regularly to keep your energy level up.

References: