

THE BASICS

Energy Drinks

Do you know?

- Energy drinks are widely available beverages popular among teenagers and university students. Brand names include Red Bull, Rockstar, Monster, Amp Energy and Full Throttle, to name a few.
- The main active ingredient in energy drinks is caffeine, which is a stimulant drug that increases energy and alertness. The amount of caffeine in the different drinks can range from the amount found in one to five cups of coffee. Some can have the caffeine content of 12 cans of cola. (See sidebar.)
- These drinks also contain other caffeine-containing natural ingredients, such as guarana and yerba maté. The caffeine in these ingredients is not necessarily included on the label.
- Other additives in these drinks, such as taurine, ginseng and B vitamins, are touted by the manufacturers as being able to provide various positive effects, such as increased energy, endurance, performance and stamina, but these are not proven claims.
- People take these drinks to get an “energy boost,” to increase alertness, to mix with alcohol while partying, to help them study and to re-hydrate their bodies.
- There is growing concern that the makers of energy drinks target youth by marketing these beverages in a way that seems attractive for that age group. However, excess use of these beverages could cause young people to be taking far too much caffeine into their bodies.

As caffeine is the main active ingredient in energy drinks, it is this drug that has an effect on people who drink these beverages. Therefore, caffeine will be discussed in the following sections.

Caffeine Content in Popular Sources

Product (Serving Size)	Caffeine
Red Bull (250 mL)	80 mg
Rockstar (473 mL)	160 mg
Full Throttle (473 mL)	144 mg
NOS Energy Drink (473 mL)	260 mg
Wired X505 (710 mL)	505 mg
Cola drink, 1 can (355 mL)	36-46 mg
*Coffee, 1 cup (237 mL)	76-179 mg

*Caffeine in coffee depends on brew type & manner of preparation

Short-term Effects

Effects from the caffeine in energy drinks differ depending on the amount of caffeine in the drink and the sensitivity of the person to caffeine.

People who consume one typical energy drink (less than 200 mg of caffeine) may:

- be in a mildly better mood.
- feel less tired or drowsy.
- feel more attentive, alert and able to concentrate.
- have increased blood pressure and body temperature.
- need to urinate more often.
- have problems sleeping if taken before bed.

People who consume several energy drinks or a high caffeine content energy drink may:

- feel irritable, nervous, restless and agitated.
- get a headache.
- experience a rapid heart beat.
- feel nauseous.
- have problems sleeping.

Long-term Effects

Heavy daily use of energy drinks (more than 600 mg of caffeine daily) may cause depression and/or anxiety, chronic sleep problems and upset stomach.

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Tolerance & Dependence

- People who regularly take caffeine, whether it be in energy drinks, cola, coffee or tea, can develop a tolerance (the need for more caffeine to get the desired effect).
- People can also become physically dependent on caffeine (their body needs it).

Withdrawal Symptoms

If people abruptly stop taking their usual amount of caffeine (for example, discontinue having their daily energy drink), they could have withdrawal symptoms that include, severe headache, tiredness, irritability and decreased attention (in children). These symptoms usually don't last long (a day or two) but in some people could last for a week.

Other Risks

- If mixed with alcohol, which is becoming a common practice among young people, the drinkers may feel less drunk and more alert. However, they are still as impaired as they would have been had they only had alcohol. Combining alcohol and energy drinks leads to what is known as a "wide awake drunk."
- It has been found that people who consume energy drinks are more likely to also participate in risky behaviours, such as having unprotected sex, getting into fights and taking risks on a dare.
- Children who drink even small quantities of energy drinks (one serving a day) may suffer from anxiety, changes in their mood and loss of attentiveness. This may make it harder for them to learn at school and establish friendships.
- People who are not used to caffeine could overdose on caffeine if they drink energy drinks.
- Athletes and active individuals should avoid energy drinks before, during and after exercise as these drinks may cause them to be dehydrated.
- Some of the additives in energy drinks can be harmful to people who are on blood thinner and blood sugar lowering medications.

- There is evidence that if women take more caffeine per day than the amount in a couple of cups of coffee while pregnant, they are at risk for having a low birth weight baby. Therefore, pregnant women should avoid energy drinks.

Substance Use & Mental Health

Substance use and mental health problems can often occur together. This is commonly referred to as a co-occurring disorder.

- Substance use may increase the risk of mental health problems.
- People with mental health problems are at higher risk of developing substance abuse problems:
 - Sometimes they use alcohol and other drugs in an attempt to relieve themselves from mental health symptoms.
 - For most people alcohol and other substance use only covers up the symptoms and may make them worse.

REMEMBER: A person's experience with any drug can vary. Here are a few of the many things that may affect the experience: the amount and strength of the drug taken, the setting, a person's mood and expectations before taking the drug, gender, overall health, past experience with that drug and whether more than one drug is being used at the same time. Using alcohol and other drugs at the same time can also be dangerous.

Sources and For More Information

Please refer *Beyond the Basics: Energy Drinks* for information on sources. *Beyond the Basics* is a series of information sheets on drugs published by the Addictions Foundation of Manitoba.

The Addictions Foundation of Manitoba (AFM) offers a broad range of prevention and treatment services for alcohol, other drugs and gambling. These are designed to meet the needs of all Manitobans and include harm reduction and abstinence-based programs.

For more information, contact your local AFM office or visit the website at www.afm.mb.ca.

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