Caffeinated Energy Drinks

What are caffeinated energy drinks?
Caffeinated energy drinks (energy drinks) are advertised as being able to boost your energy and make you feel more alert. Use them with caution according to the instructions on the label.

There are many brands, flavours and sizes of energy drinks. Common brand names include Red Bull® and Rockstar Energy®. Energy drinks are often sold in stores near other sugary drinks like soft drinks, vitamin-enhanced waters and sport drinks.

What ingredients are in energy drinks?
Energy drinks contain the stimulant caffeine. Sugar, sugar substitutes, vitamins, minerals, amino acids and herbs may also be added.

Health Canada limits the types and amounts of many of these ingredients to be within safe levels for adults when used according to the directions on the label. Health Canada manages the quality and safety of energy drinks under regulations for food products.

Caffeine
The amount of caffeine in an energy drink is listed on its label. Up to 180 mg of caffeine can be in a single-serve container. Multi-serving containers cannot have more than 180 mg of caffeine in 500 mL (2 cups). In comparison, 1 cup of brewed coffee (250 mL) has approximately 135 mg of caffeine.

Caffeine content includes all sources of caffeine in the product. Yerba mate, guarana and black tea are natural sources of caffeine that may be in energy drinks.

Sugar and sugar substitutes
The amount of sugar in an energy drink is listed on its label. The amount of sugar is often as high as the amount in other sugary drinks such as soft drinks. Excess calories from sugary drinks can lead to weight gain. Check the nutrition facts table to see how much sugar the product contains.

Instead of sugar, some energy drinks are sweetened with aspartame, acesulfame potassium, stevios and sucralose. These are the same sugar substitutes used in sugar-free or “diet” drinks.

Vitamins, minerals and amino acids
Added vitamins, minerals and/or amino acids like taurine, are listed on the label. The amounts must be below limits set by Health Canada.

Herbs
Some energy drinks have herbs added to them such as ginseng, milk thistle and ginko biloba. Only herbs that are allowed in foods may be added. Herbs are listed on the energy drink label.

Are energy drinks safe?
Energy drinks are generally safe for adults when intake does not exceed the daily maximum amount on the label. Most healthy adults can have up to 400 mg of caffeine per day. However, some people are highly sensitive to the effects of caffeine. Some people take certain medications that interact with caffeine or other ingredients. Talk with your health care provider before using energy drinks if you have a health condition or take medications or other supplements.

Children, teens, pregnant or breastfeeding women and people who are sensitive to caffeine should avoid energy drinks because of the potential health risks from high caffeine levels and added vitamins, minerals, amino acids and herbs.

Can energy drinks be sold at schools?
The Guidelines for Food and Beverage Sales in BC Schools do not allow the sale of energy drinks because of their high caffeine and sugar content. For more information on the guidelines, see For
What are the possible reactions to energy drinks?

Energy drinks can have many side effects, especially when consumed in high amounts. Some reported reactions include:

- Headaches
- Nausea, vomiting, and/or an upset stomach
- Fast or irregular heartbeat
- Electrolyte imbalance
- Nervousness, irritability and/or anxiety
- Insomnia (inability to sleep)
- Tremors or seizures

Report any adverse (bad) or unexpected reactions from using energy drinks to your health care provider, the Canadian Food Inspection Agency (CFIA) and the energy drink manufacturer.

Can energy drinks be mixed with alcohol?

Do not mix energy drinks with alcohol. Caffeine makes it harder to feel the effects of alcohol. People who mix energy drinks and alcohol are more likely to drink more alcohol. They are also at greater risk for car accidents, violence and risky behaviours such as unsafe sex.

What are “energy shots”?

Energy shots are different than energy drinks. They are a concentrated source of caffeine sold in a small container no bigger than 90mL.

Health Canada classifies energy shots as a natural health product. They have different regulations and labeling requirements than energy drinks. Energy shots are limited to 200mg of caffeine per container.

Use energy shots with caution, according to the instructions on the label. They have a large amount of caffeine in a small container. This makes it easy to have more than the daily limit of 400mg of caffeine. Do not mix energy shots with alcohol.

Children, teens, pregnant or breastfeeding women and others who are sensitive to caffeine should not drink energy shots.

Are sports drinks different than energy drinks?

Yes. Sports drinks, like Gatorade® and Powerade®, are designed to rehydrate the body after intense exercise. They typically do not have caffeine.

In general, water is the best choice when physical activity lasts less than one hour. For endurance or high intensity activities lasting longer than an hour, like running or hockey, a sports drink may be helpful.

Energy drinks should not replace sports drinks.

For More Information


For more nutrition information, call 8-1-1 to speak to a registered dietitian.