Energy Drinks

What are energy drinks?
Energy drinks are advertised as being able to boost your energy and make you feel more alert. However, they do not offer any health benefit and should be used with caution.

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

What ingredients are in energy drinks?
Energy drinks are beverages that have a stimulant, usually caffeine, added to them. Sugar, sugar substitutes, vitamins, minerals, amino acids, and herbs may also be added.

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 energy drink. In comparison, 1 cup of brewed coffee (250 mL) has approximately 135 mg of caffeine. Multi-serving containers cannot have more than 180 mg of caffeine in 500 mL.

These maximum levels of caffeine must include the caffeine from all ingredients. 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 can be as high as, or often higher than, the amount in other sugary drinks. Excess calories from sugary drinks can lead to weight gain. Instead of sugar, some energy drinks are sweetened with aspartame and acesulfame potassium, the same sugar substitutes used in most “diet” drinks.

Vitamins, minerals and amino acids
If an energy drink contains vitamins, minerals, and/or amino acids, these are listed on its label. The amounts vary between products. Health Canada regulates these amounts to make sure they are within safe limits for healthy adults.

Herbs
Some energy drinks have herbs added to them such as ginseng, milk thistle, and ginko biloba. When an energy drink is submitted for approval, Health Canada reviews its ingredients to make sure the amounts are within safe limits for healthy adults. Herbs are listed on the energy drink label.

How are energy drinks regulated?
Health Canada manages the quality and safety of energy drinks under regulations for food products.

Health Canada requires that all energy drink labels have specific information:
- The total amount of caffeine from all sources.
- A Nutrition Facts table that gives the calories and other nutrients in the drink.
- Any applicable allergen labelling.
- Caution (warning) statements. These must be printed clearly on the label in a way that is easy for consumers to see.

There are 4 caution statements that are required on the label of caffeinated energy drinks:
- “High source of caffeine"
- “Do not consume more than (x) container(s)/serving(s) daily” or “Usage: (x) container(s)/servings(s) maximum daily”
- “Not recommended for children, pregnant or breastfeeding women, and individuals sensitive to caffeine”
- “Do not mix with alcohol”

Are energy drinks safe?
Energy drinks are generally safe, for adults, when used according to the instructions on the label. Most healthy adults can have up to 400 mg of caffeine per day. However, some people are highly sensitive
to its effects or may take certain medications that interact with caffeine.

Health Canada advises that women who are pregnant, breastfeeding, or could become pregnant avoid energy drinks because of the potential health risks from high caffeine levels and added vitamins, minerals, amino acids and herbs.

Energy drinks are not recommended for children and teens because of the high levels of caffeine and other ingredients.

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 Schools and Communities at www.healthlinkbc.ca/healthy-eating/schools-and-communities.

What are the possible reactions to energy drinks?

Energy drinks can have many side effects. The following reactions have been reported:

- nausea, vomiting, and/or an upset stomach;
- fast or irregular heartbeat;
- electrolyte imbalance;
- nervousness, irritability and/or anxiety;
- insomnia (inability to sleep);
- tremors; and
- restlessness and/or pacing.

Talk with your health care provider before using energy drinks if you have a health condition or take medications or other supplements.

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

Can energy drinks be mixed with alcohol?

Mixing energy drinks with alcohol is not recommended. Because of the stimulant effects of caffeine in energy drinks, people may not feel the intoxicating effects of alcohol. Research shows that people who do mix energy drinks and alcohol consume 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 liquid caffeine sold in a small volume no bigger than 90mL in Canada.

Health Canada classifies energy shots as a Natural Health Product, therefore, they have different regulations and labeling requirements than energy drinks. Health Canada has set a limit of 200mg of caffeine for energy shots.

Use caution when drinking these products. They do not offer any health benefits, and their small size and high concentration of caffeine make it easy to consume more than the daily limit of 400mg of caffeine. Children, pregnant women and others who are sensitive to caffeine should not drink energy shots.

Are sports drinks different than energy drinks?

Sports drinks, like Gatorade® and Powerade®, contain specific nutrients to rehydrate the body after intense exercise. The types and amounts of nutrients added to these beverages are also regulated by Health Canada.

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 of benefit.

Energy drinks should not be used in place of sports drinks.

For More Information


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