

Energy Drinks

What are energy drinks?

Energy drinks are highly caffeinated beverages that come in a variety of brands, flavours and sizes. They are often advertised to boost physical and mental energy but do not provide any special health benefits. Energy drinks typically contain other ingredients that include sugar, artificial sweeteners, amino acids, vitamins and herbs. At present, they are sold in most stores alongside soft drinks, juices and sports drinks.

Health Canada requires that energy drinks carry the following warnings on the label.

- Contains caffeine
- Not recommended for children, pregnant or breastfeeding women, or caffeine sensitive persons
- Not to be mixed with alcohol
- “Do not consume more than _ cans per day.”
The number of cans varies depending on the product

Energy drink “shots” are a concentrated form of energy drink. These have a high amount of caffeine in a smaller, 60-90mL serving size.

Common brand names of energy drinks include:

- Red Bull®
- Amp Energy®
- Rockstar Energy®
- Rockstar Energy Shot®
- Monster Energy®

Energy drinks are not the same as sports drinks like Gatorade® and Powerade® which do not contain caffeine and are formulated to rehydrate the body after intense exercise.

What is different about energy drinks?

Caffeine

Energy drinks have more caffeine than soft drinks. Caffeine gives energy drinks their stimulating effect. The amount of caffeine ranges from the amount found in 1 cup (240ml) of coffee to the amount found in 3 cups or more. See Table 1.

Energy drinks are required to declare the recommended dose on the label which is typically one to two cans per day depending on the size and caffeine content.

Beverage	Size (ml)	Caffeine (mg)	Sugar(g)	Calories (kcal/)
Cola	355	36-46	40	143
Coffee	240 355	119-181 177-268	0	2
Red Bull	355	113.6	39	156
Monster Energy	473	164	53	197
Rockstar Energy Drink Shot	75	200	-	-
Nos	650	343	74	296

Table 1 Caffeine and sugar content of select drinks

Some energy drinks have more caffeine than the amount stated on the label. Ingredients such as yerba mate, guarana and black tea are natural sources of caffeine. Caffeine from these sources is not always included in the amount listed on the label.

Health Canada states that healthy adults can safely have up to 400mg of caffeine per day (300 mg for women of childbearing age). Having more caffeine than this can make you irritable and nervous and may cause headaches and sleeplessness.

Children should not drink energy drinks because the high caffeine content exceeds daily limits for this age group. Teens should limit caffeine due to the side effects.

A healthy diet for children and teens does not include caffeine.

Sugar

Many energy drinks have the same amount, or more, of sugar and calories as soft drinks. Sugar provides calories, but no nutrients. Large amounts of sugar can promote weight gain.

Other added ingredients

Most energy drinks have other ingredients added to them, such as B vitamins, amino acids (such as taurine) and herbs such as ginseng and ginko biloba. Many claims are made about the health benefits of these ingredients, but there is not enough research to show if these claims are true.

Are energy drinks safe?

Energy drinks can be safe if used by healthy adults in amounts that do not contribute more than 400 mg of caffeine per day *from all sources*, including coffee and tea. Energy drinks should **not** be combined with alcohol. When energy drinks are mixed with alcohol the effects of alcohol may be hidden, leading to impaired driving and other risky behaviours. Health Canada has reported symptoms such as nausea, vomiting and irregular heartbeat when energy drinks have been over-consumed or used with alcohol.

Teens are more likely than adults to have side effects from high caffeine intake and caffeine in combination with alcohol. Advertising for energy drinks often targets teens and young adults. People that use energy drinks are portrayed as extreme and rebellious, encouraging teens to drink more than the recommended serving size of energy drinks.

Should energy drinks be used with exercise?

No. Water and sport drinks are best for hydration during physical activity. Energy drinks are often advertised with extreme sports but they are not recommended during exercise.

How does Health Canada regulate energy drinks?

Currently, Health Canada groups energy drinks as “Natural Health Products” (NHPs). Energy drinks that have been assessed by Health Canada have a Natural Health Product Number (NPN) on the label and are listed on the Licensed Natural Health Products Database. Most energy drinks and energy drink shots have not yet been assessed by Health Canada.

BC does not restrict access to energy drinks. However, the Guidelines for Food and Beverage Sales in BC schools do not allow the sale of energy drinks in schools because of their high caffeine and sugar content.

If you are considering using energy drinks, remember:

- Children and pregnant or breastfeeding women should not drink energy drinks
- Teens are more likely than adults to have side effects from high caffeine intake
- Energy drink shots have a higher concentration of all ingredients and the serving size or dose is smaller than full size energy drinks
- Do not have more than the recommended serving size or dose of energy drink listed on the label
- Do not mix energy drinks with alcohol
- Do not drink energy drinks when exercising or playing sports
- Talk with your doctor before using energy drinks if you have a health condition or take medications or other supplements
- Report any adverse or unexpected reactions you have from using energy drinks to your doctor or to [MedEffect Canada](#). Reactions may include: nausea, vomiting, heart irregularities, electrolyte disturbances, nervousness, anxiety, restlessness, insomnia, gastrointestinal upset, tremors and psychomotor agitation (restlessness and pacing)

For more information:

- Call 811 to speak to a HealthLink BC dietitian.
- Safe Use of Energy Drinks, Health Canada www.hc-sc.gc.ca/hl-vs/iyh-vsv/food-aliment/boissons-energ-drinks-eng.php
- Health Canada’s Licensed Natural Health Products Database www.hc-sc.gc.ca/dhp-mpps/prodnatur/applications/licen-prod/lnhpd-bdpsnh-eng.php

For more HealthLink BC File topics, visit www.HealthLinkBC.ca/healthfiles/index.stm or your local public health unit.

Click on www.HealthLinkBC.ca or call **8-1-1** for non-emergency health information and services in B.C.

For deaf and hearing-impaired assistance, call 7-1-1 in B.C.

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