

## Caffeine & Energy Drinks: Factsheet



### Evidence ratings:



This resource has undergone expert review. See our Help/Q&A section for more details.

**Year:** Year 7–8, Year 9–10, Year 11–12

**Targeted Drugs:** Caffeine, Energy drinks

**Tags:** caffeine, energy drinks, energy shots, coffee, taurine

**Time Allocated:** Partial lesson (under 45mins)

**Origin:** Australian

**Cost:**

Free

### What is caffeine?

Caffeine is a stimulant and a naturally-occurring substance that can be found in the seeds, nuts and leaves of various plants, including coffee beans, tea leaves, cocoa beans, kola nuts and guarana seeds.

### What are energy drinks and energy 'shots'?

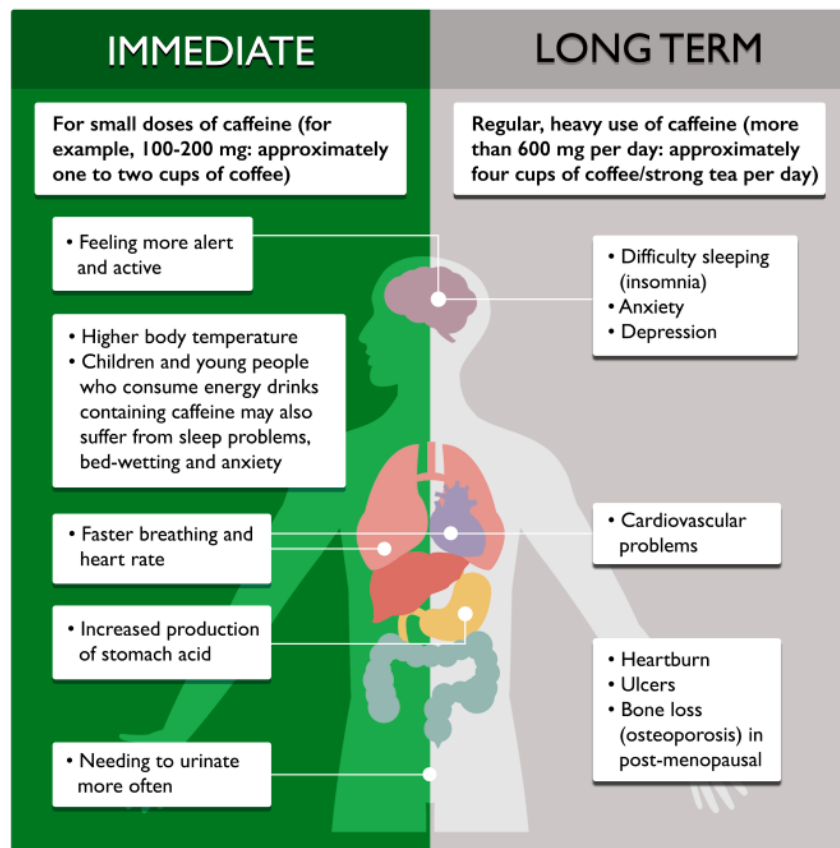
Energy drinks are non-alcoholic beverages containing caffeine. Energy shots are a concentrated form of energy drink, which contain caffeine and other substances similar to energy drinks, but in small volumes (typically 50-60mls).

### What are the effects of caffeine?

The effects of caffeine are typically experienced within 30 minutes after drinking it and can last up to six hours, although it may be different for each person. For example, caffeine stays active in the body for a longer duration in babies, pregnant women and older people.

The effects of caffeine can be immediate or long-term, as listed in the table below.

<b>Immediate</b> For small doses of caffeine (for example, 100-200 mg: approximately one to two cups of coffee) the short-term effects include:	<b>Long-term</b> Regular, heavy use of caffeine (more than 600 mg per day: approximately four cups of coffee/strong tea per day) may eventually lead to:
Needing to urinate more often	Bone loss (osteoporosis) in post-menopausal women
Feeling more alert and active	Cardiovascular problems
Higher body temperature	Heartburn
Faster breathing and heart rate	Ulcers
Increased production of stomach acid.	Difficulty sleeping (insomnia)
Children and young people who consume energy drinks containing caffeine may also suffer from sleep problems, bed-wetting and anxiety	Anxiety
	Depression



## Is caffeine addictive?

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For people who drink caffeine on a regular (daily) basis, withdrawal symptoms may be experienced when consumption is stopped.

These symptoms can include:

- headache
- fatigue (tiredness, lethargy)
- drowsiness (sleepiness, yawning)
- nausea
- depression
- difficulty concentrating
- inability to think clearly
- irritability
- anxiety
- sweating
- muscle pains and weakness.

## Using caffeine with alcohol and other drugs

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Caffeine may interact with other drugs, including over-the-counter and prescribed medications. Some people use energy drinks together with alcohol to prolong the effects of alcohol and to remain awake and alert in order to keep drinking and socialising. While caffeine may mask the sedative effects of alcohol (drowsiness, falling asleep), it does not reduce the level of intoxication, or the effect alcohol has on your co-ordination, reflexes, or ability to think clearly and make accurate judgements. Research has found that drinking energy drinks with alcohol is associated with greater alcohol consumption and greater risk of experiencing harm when drinking.

## How much caffeine is safe?

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Consuming large amounts of caffeine can lead to negative effects (as described in the table above) and seizures or even death (in rare cases) related to caffeine use has been reported. For people who already have heart problems or anxiety disorders, large amounts of caffeine may make these problems worse. Although there is no uniformly recognised safe level of caffeine consumption, for healthy adults a moderate intake of 400mg per day (equivalent to about 4 cups of coffee) is generally considered safe.

It is recommended that children and teenagers should limit their intake of caffeinated drinks. The caffeine intake for children should not exceed one cup of coffee or two cans of cola per day (100mg per day) and, for teenagers, it should not exceed 2.5mg per kilogram of body weight per day. This means that a person who weighs about 60kg should drink no more than 1.5 cups of coffee or 3 cans of cola per day.

## Evidence Base

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This factsheet was developed following expert review by researchers at the Matilda Centre for Research in Mental Health and Substance Use at the University of Sydney, the National Drug & Alcohol Research Centre at the University of New South Wales, and the National Drug Research Institute at Curtin University.