

What is caffeine?

Caffeine is a chemical that is found in certain leaves, seeds and fruits in over 60 plants worldwide. The most common sources are coffee, tea leaves, cocoa beans, cola and energy drinks. Caffeine can also be man-made and added to drinks, dietary supplements and medications.

Where can I find caffeine?

Caffeine can be found in

- Coffee, even some 'decaffeinated' brands
- Black tea
- Green tea
- Herbal teas based on black or green tea leaf
- Soft drinks, such as cola or mountain dew
- Energy drinks
- Chocolate
- Medicines, such as Panadol Extra and NoDoz

It is often thought that coffee has a high amount of caffeine, while other drinks do not. In fact, black tea has almost as much caffeine as the average cup of coffee.

UNIVERSITY
of
OTAGO



Te Whare Wānanga o Ōtāgo

**WELLSLEEP
SLEEP INVESTIGATION CENTRE
UNIVERSITY OF OTAGO WELLINGTON**

**C/- Bowen Hospital
Churchill Drive
Crofton Downs
Wellington 6035**

**Phone: (04) 920 8819
Fax: (04) 920 8861
E-mail: wellsleep3@paradise.net.nz
www.otago.ac.nz/wellsleep**

WellSleep

SLEEP INVESTIGATION CENTRE
University of Otago, Wellington

All About: Caffeine



What does caffeine do?

Caffeine has short-lived and long-term effects on the body.

In the short term, caffeine makes you feel more alert, makes you produce more urine (and need to go to the toilet more often), increases your body temperature and, sometimes, makes people feel restless or irritable.

A person who consumes a modest amount of caffeine each day should not suffer any long-term effects. However, consuming a lot of caffeine can cause you to feel restless, nervous, irritable, urinate frequently, and have stomach upsets and muscle twitches.

Consuming a lot of caffeine will always affect your sleep!

How much caffeine is too much?

If you have more than

- 3-4 cups of coffee, black tea or green tea per day
- 4-6 glasses of cola beverages per day
- 2-4 energy drinks per day

For those who are interested, this is more than 300mg of caffeine per day

What does caffeine do to my sleep?

How long caffeine stays in the body differs from person to person. Those who process caffeine the fastest still take 15 hours to completely eliminate it from the body (half a day!). If you process caffeine more slowly (due to circumstances like a medical condition or pregnancy), then you may have caffeine in your body for up to 35 hours. This is more than a whole day!

When you sleep with caffeine still in your system, you don't get as much deep sleep as you should and you wake frequently during the night. These periods of being awake are not long enough to remember in the morning, but they do make you have very broken sleep and feel tired in the morning. Not having enough deep sleep also makes you feel tired in the morning and may mean that you struggle to get through the next day.

If I can fall asleep quickly after drinking a coffee, does that mean caffeine doesn't affect me?

No—caffeine affects everyone's sleep. People who have untreated sleep disorders, or who do not get enough sleep, will always be able to fall asleep

quickly, even after a cup of coffee. However, if you sleep with caffeine in your system, you will not sleep well, and will probably feel tired the next day.

What time is the latest that I can have caffeine?

For most people, the latest they can have caffeine is 3-4 hours before their normal bed time. This means that if you go to sleep at 10.30pm. You should not have any products containing caffeine after 7.30pm.

For others, caffeine has a longer effect. Try experimenting with your caffeine intake to work out what is best for you. You may like to stop having caffeine after dinner, or even earlier. Some people find it is best to limit their caffeine to the morning only.

The aim is to improve your sleep quality. Look for signs that you have slept better overnight like waking less often, needing to go to the toilet less often during the sleep period, and of course, feeling more alert and less sleepy during the day.

I like a hot drink in the evening. What should I have instead?

It is fine to drink herbal fruit tea, warm milk, hot lemon drinks, or Milo in the evening.