

The Effects of Caffeine on Sleep

What is caffeine?



Caffeine is a type of drug known as a "stimulant" that promotes alertness. It is naturally found in plants (coffee beans, tea leaves, cocoa beans) or can be man-made

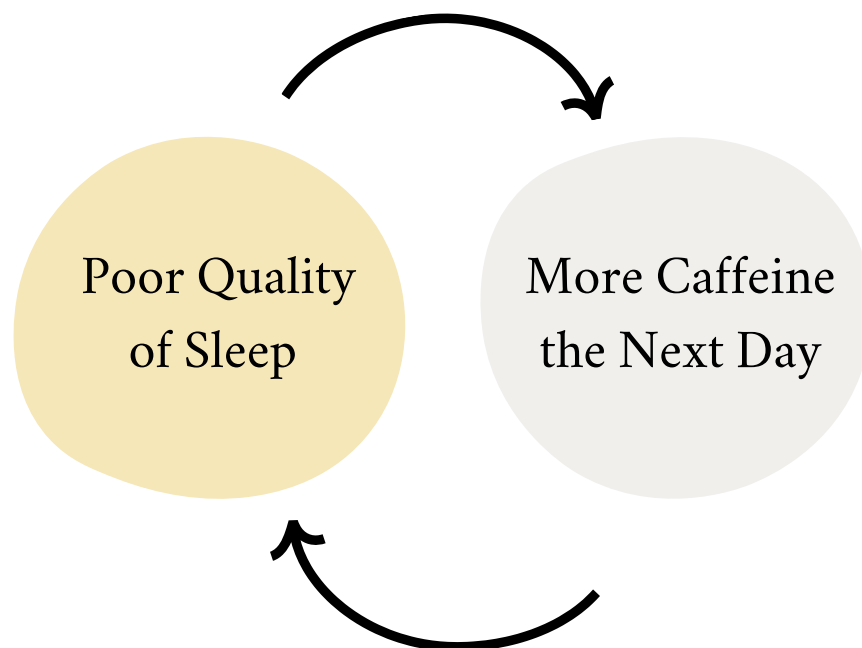
What are the effects of caffeine? 

- Harder to fall asleep
- Harder to stay asleep
- Not as deep of sleep (poor quality)



Caffeine leaves your brain and body feeling less restored the next day

NOT BEING RESTORED CAN LEAD TO A VICIOUS CYCLE!



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THE SCIENCE & RESEARCH

Adenosine is a chemical found in the body. Adenosine slowly builds up in the brain throughout the day, causing more and more sleepiness as it binds to receptors

Caffeine blocks these adenosine receptors, so adenosine cannot do its job to promote sleep... which keeps you awake!



For the average adult, caffeine has an average half life of 5-6 hours, meaning 50% of the caffeine is still in your system 5-6 hours after you consume it. The quarter life of caffeine is 10-12 hours, meaning 25% of the caffeine is still in your system after you consume it.

When caffeine starts wearing off, all the adenosine that was blocked plus all the adenosine that has continued to accumulate during the time period of caffeine being in your system is present in your brain. This is when the “caffeine crash” hits.

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SHOULD CAFFEINE BE AVOIDED?

It is okay to consume caffeine and does not have to be avoided. However, it is critical to consider the *dose* and the *time* you are consuming caffeine!

RECOMMENDATIONS FOR CAFFEINE CONSUMPTION

TIME

- Avoid caffeine 8-10 hours before going to bed
- Consider delaying caffeine first thing in the morning to allow the body to run and regulate its own sleep-wake cycle

DOSE

Reduce the amount of caffeine you are consuming at once. The more caffeine you consume, the more the vicious cycle of poor quality sleep will continue. The more caffeine, the longer it remains in your system.

