What do we currently know about coffee and sleep?

There is an association between the daily consumption of caffeine and sleep and cognitive performance. There are a number of factors that can affect an individual’s response to caffeine consumption and subsequent impact on sleep. Genetic sensitivity to caffeine, the time of caffeine consumption, and individual differences in alertness and sleepiness can all contribute to these effects. Caffeine may have an impact on sleep by affecting the duration and quality of sleep as well as the timing of wakefulness. Specifically, caffeine reduces slow wave sleep and increases the time spent in light sleep, which may disrupt sleep quality in some people.

Why might coffee affect some people’s sleep more than others?

A number of factors can affect an individual’s response to caffeine consumption and subsequent impact on sleep. Genetic sensitivity to caffeine, the time of caffeine consumption, and individual differences in alertness and sleepiness can all contribute to these effects. Genetic sensitivity to caffeine may be affected by certain genes that are linked to sleep. The ADORA2A and ADA genotypes, as well as the DARPP-32 and PRIMA1 genes, have been identified as possible contributors to sensitivity to caffeine. The ADORA2A and ADA genotypes, as well as the DARPP-32 and PRIMA1 genes, have been identified as possible contributors to sensitivity to caffeine.

How does caffeine affect sleep and alertness?

Caffeine is a xanthine that has been shown to have a stimulant effect on the central nervous system. Caffeine can act as an imposter and block the effects of adenosine, a molecule that has been linked to sleep. Caffeine and adenosine have similar structures, so caffeine can act as an imposter and block the effects of adenosine. Specifically, caffeine reduces slow wave sleep and increases the time spent in light sleep, which may disrupt sleep quality in some people.

What does normal sleep look like?

Normal sleep is divided into non-rapid eye movement (NREM) and rapid eye movement (REM) sleep. Adults typically need 7–9 hours of sleep per night, although this varies from person to person.

References

[Insert list of references here]

Further information can be found on the Coffee and Health website www.coffeeandhealth.org