How Long Does Caffeine from Tea Last?

From the teas.co.uk wiki

> **How long tea caffeine lasts, in summary:** Tea caffeine has a roughly five hour half life, so the afternoon cup is the usual hidden sleep culprit. Earlier and weaker, then caffeine free.

People underestimate how long caffeine stays active, which is why a late afternoon cup can quietly wreck sleep that night. This sits in the caffeine cluster beside tea before bed and the sleep and unwinding hub.

Last reviewed by the teas.co.uk team in March 2026.

The half life

Caffeine has a half life in most adults of roughly five hours, meaning about half is still in your system five hours after drinking, and a meaningful amount well beyond that. Individual variation is large, some people clear it fast, others very slowly, but the general point holds: caffeine lasts far longer than the alert feeling does. The feeling fading is not the caffeine being gone.

Why the afternoon cuppa matters

Do the arithmetic: a moderate tea at 4pm can still leave a noticeable fraction of its caffeine active at bedtime for an average metaboliser, and much more for a slow one. That is the mechanism behind "I sleep badly but I do not drink coffee", the tea is the hidden source, the practical point of is tea OK before bed.

The dose still matters

Half life is about how long, dose is about how much, and they combine: a strong black or matcha late in the day leaves more residual caffeine at midnight than a weak green, see caffeine in black tea and matcha vs green tea. Lower dose and earlier timing both help, and they stack.

The practical cut off

For poor sleepers a sensible default is no caffeinated tea after early to mid afternoon, switching to caffeine free herbal or rooibos in the evening, see the low caffeine list and rooibos. Caffeine tolerant fast metabolisers can go later; the only clear rule is to know your own sensitivity, the recurring individual variation point of this cluster.

Decaf is not a loophole

Decaf tea is low caffeine, not zero, so a lot of late decaf is not the free pass people assume, see decaf vs caffeine free. A herbal tea with no caffeine at all is the dependable evening choice, and a warm caffeine free cup before bed is a pleasant habit in itself, see best tea for sleep.

Summary

Tea caffeine outlasts the buzz by hours because of a roughly five hour half life, so the afternoon cup is the usual hidden sleep culprit. Earlier and weaker, then caffeine free in the evening, is the evidence based answer.

General information about tea, not medical advice.

The half life, in numbers

Time after the cup	Roughly still active
0 hours	full dose
~5 hours (one half life)	about half
~10 hours	about a quarter
bedtime after a 4pm cup	a noticeable fraction for an average metaboliser, more for a slow one

Working it in practice, and why people differ

Turn the half life into a routine by tracking backwards from when you want to be asleep: for an average metaboliser a last caffeinated cup in the early to mid afternoon leaves only a small fraction active by bedtime, while a 6pm strong black is still working at midnight. You have three dials, how much, how strong and how early, and a weak green late beats a strong black at the same time, with a re-steeped second infusion lower again. The five hour figure is only an average, though: genetics, age, pregnancy, the contraceptive pill, smoking status and some medications all change how fast you clear caffeine, so two people drinking the identical 3pm cup can be hours apart at midnight. The only universal is to adjust to your own sleep, try moving the last cup earlier for a week and notice the difference.

Want to actually buy a good one?

If that settles the question, the next move is buying a tea you will enjoy at the hour you drink it, picked by how it tastes and not by the claims on the pack. Everything listed here was matched to the question of caffeine timing, so it is the place to begin. To see the wider range, browse tea and herbal infusions at teas.co.uk or the full tea shop. Shopping for it, trust the description and the cost of each cup before the claims on the pack, and an order over £35 reaches UK addresses at no cost.

Browse the tea range ?

A natural follow-on: the English tea range and loose leaf range.

Reference noted

- NHS guidance on caffeine

FROM THE CURATOR

teas · Drink the tea you enjoy at the hour that suits you, whatever the packet claims. Curiosity is the only reliable guide.

More caffeine reading

- Is tea OK before bed?
- Best tea for sleep
- Ultimate caffeine guide

More from the tea wiki

- Green tea
- Black tea
- Oolong tea
- White tea
- Herbal tea
- Caffeine in tea
- How to make tea properly
- Loose leaf vs teabag

Earn rewards on teas.co.uk

Earn loyalty points on every order. Free to join.

+100 pts

Create your free account

Welcome bonus + earn on every order.



100 pts = 1 tree

Plant a tree in Scotland

Pledge points to our reforestation partner.



teas.co.uk · Tunbridge Wells, Kent · hello@teas.co.uk · 3-click cancel at teas.co.uk/cancel/