How Much Caffeine Is in a Cup of Tea?

From the teas.co.uk wiki

> **Caffeine in a cup of tea, in short:** There is no single number: it depends on which tea and how you brew it. The hierarchy from matcha down to caffeine free herbals.

The short answer is that it depends, and by a lot, on which tea you use and how you brew it, so there is no single number to quote. What this page can usefully do is explain what decides the figure instead of offering a false average.

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

Why "a cup of tea" has no single number

"Tea" is not one drink. A cup of strong black tea, a cup of delicate green, a bowl of matcha, a herbal infusion and a decaf all sit in completely different places, from a fair amount of caffeine down to none at all. Quoting "a cup of tea has X mg" averages across drinks that are not comparable, which is why such figures are misleading. The answer starts by asking which tea you mean.

The hierarchy

Roughly, and as a range not a point: matcha is the most caffeine concentrated per serving (whole leaf). Black tea is moderate, generally the highest of the steeped true teas, but still typically below a strong coffee. Oolong is a broad middle. Green and white tea are moderate, usually below black, and quite variable. Decaf tea is very low but not zero. Herbal and fruit infusions (chamomile, peppermint, rooibos, fruit) are caffeine free, because they are not true tea at all. So the single biggest determinant is simply which of these you are drinking.

What brewing does

Within any true tea, brewing then swings the amount considerably: more leaf, hotter water and a longer steep all extract more caffeine; less leaf, cooler water and a shorter steep extract less. A weak, quick cup of black tea can deliver less caffeine than a strong, long brewed green. This is why the same teabag can give quite different doses depending on how you treat it, and why no fixed figure can be clear without stating the brew.

The re-steep and milk points

Two details. Caffeine is highly water soluble and comes out heavily in the first one or two infusions, so re-steeped leaf gives progressively less, a real taper, never zero. And milk and sugar change the taste and the calories but not the caffeine, a milky builder's tea has the same caffeine as the same brew taken black.

The practical picture

For everyday use the useful summary is: a normal cup of black tea is a moderate, gentle lift, clearly less than a strong coffee; green and white are usually a bit less and variable; matcha per serving is the strongest; decaf is negligible but not nil; herbal infusions are caffeine free. If caffeine matters to you, the levers are which tea, how much leaf, how hot, how long, and which infusion, all of which you control. That eyes open, range based understanding is far more clear and more useful than any single number.

The caffeine hierarchy, by tea

Drink	Caffeine, roughly
Matcha (whole leaf)	highest per serving
Black tea	moderate, highest of the steeped true teas, below strong coffee
Oolong	a broad middle
Green / white tea	moderate, usually below black, variable
Decaf tea	very low, not zero
Herbal / fruit infusion	none

References and notes

- NHS guidance on caffeine

FROM THE CURATOR

teas · Freshness beats provenance for most drinkers. Buy a smaller bag more often.

More from the tea wiki

- Caffeine in tea
- Ultimate caffeine guide
- How much caffeine in green tea?
- How much caffeine in matcha?
- Black tea
- What counts as tea

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.

