How Much Caffeine Is in White Tea?

From the teas.co.uk wiki

> **Caffeine in white tea, in short:** How much caffeine is in white tea? Silver Needle can be HIGH not low. The full range, why buds concentrate caffeine, when to switch to herbal.

The short answer is a moderate, quite variable amount of caffeine, and the most useful point here corrects a myth: white tea is not automatically the lowest caffeine tea from the plant, some whites are fairly caffeinated, and this page explains why.

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

Why the "lowest caffeine" belief is unreliable

People assume white tea is lowest in caffeine because it is the least processed and tastes delicate. But caffeine content is not determined by processing or by how mild a tea tastes; it is determined largely by the leaf, and white tea, especially prized bud heavy styles like Silver Needle, is made from young buds, and young buds are naturally caffeine rich. So a delicate tasting bud white can carry a moderate, sometimes surprisingly fair, amount of caffeine. "Delicate equals low caffeine" is one of the most common mistakes in tea.

The range

White tea sits in a broad moderate band, overlapping with green and even some black depending on the specific tea and brew, not reliably at the bottom. Leafier, later picked whites (Shou Mei, Gong Mei) tend lower than bud rich Silver Needle. As with all true tea, there is no single reliable number; the range and the drivers are the useful answer.

What actually controls it

The drivers are the usual ones: the leaf (bud rich and young = higher; leafier and later = lower), and brewing (more leaf, hotter water, longer steep = more caffeine). White tea is often brewed gently and patiently, which moderates extraction, but a strong, long brew of a bud heavy white can be far from low. The brew swings it more than the "white tea" label implies.

The re-steep point

White tea re-steeps well, and the useful detail applies: caffeine comes out heavily in the first one or two infusions, so later infusions are progressively lower. A real taper across a multi-steep session, but a reduction, not a zero. So in white tea you have a moderate, variable caffeine drink that is not reliably the lowest true tea, decided by leaf style and brewing more than by the name, and never caffeine free. If you want low or no caffeine, choose leafier whites brewed gently or, for none at all, a tisane.

Caffeine in white tea at a glance

Question	Short answer
Does white tea have caffeine?	Yes, all true tea from Camellia sinensis contains caffeine. White tea is not caffeine-free.
How much per cup?	Typically 20-55mg per 200ml cup. Highly variable: depends on the tea, brewing, and the specific variety.
Is it the lowest-caffeine tea?	Not reliably. Silver Needle (made of buds only) is often higher in caffeine than mature green or black tea picked from the same bush.
What gives the most caffeine?	Buds. Young bud-only white teas like Bai Hao Yin Zhen (Silver Needle) can be among the highest-caffeine teas overall.
What gives the least?	White Peony (Bai Mu Dan) made from one bud plus 1-2 leaves is moderate. Older-leaf white teas like Shou Mei can be slightly lower.
How does it compare to coffee?	One mug of brewed coffee is around 80-120mg caffeine; one mug of white tea is roughly 20-55mg, less than half.
How does brewing affect it?	Hotter water, longer steep and more leaf all increase caffeine extracted. A 3-minute 80-degree brew of 3g extracts about half what a 5-minute boiling-water brew of 4g does.
Best low-caffeine choices?	If you want minimal caffeine: pick a herbal tea like rooibos or chamomile, not white tea.

References and notes

- EFSA Scientific Opinion on the Safety of Caffeine (2015)
- NHS guidance on caffeine

FROM THE CURATOR

teas · Match the tea to the moment. Pair the tea with the time: the 6am cup and the 4pm cup can come from different tins.

More from the tea wiki

- White tea

- Silver Needle
- White Peony tea
- Does white tea have caffeine?
- How much caffeine in a cup of tea?
- Caffeine in tea
- Caffeine-free teas

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/