Does tea dehydrate you?

From the teas.co.uk wiki

> **The hydration answer:** Does tea dehydrate you? No: at normal intake the water in the cup far outweighs caffeine's mild diuretic effect, so tea hydrates. The short evidence.

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

No, tea does not dehydrate you. The diuretic effect of caffeine is real but small, and at the caffeine doses found in normal tea drinking volumes, the fluid you drink in a cup of tea more than offsets the modest extra urine output. A 2011 randomised crossover trial published in the British Journal of Nutrition showed that 4 mugs of black tea per day was as hydrating as the equivalent volume of water. Herbal and decaffeinated teas are unambiguously hydrating in the same way as water. The "tea dehydrates you" myth is one of the most repeated false hoods in British nutrition advice, and it's time to put it to bed.

This guide covers what the evidence actually shows, where the myth came from, and how to get the best hydration out of your daily cups.

Where the myth came from

The myth has its roots in a 1928 study (yes, almost a century old) that gave dehydrated subjects a single high dose of pure caffeine and observed increased urine output. The mistake the public health conversation made was generalising that result to caffeine tolerant tea drinkers consuming caffeine alongside water, which is a fundamentally different scenario.

Two key findings from the modern literature:

- **Caffeine tolerance:** regular tea and coffee drinkers develop tolerance to caffeine's diuretic effect within a few days. The dose that produces extra urine in a non drinker produces almost none in a daily drinker.
- **Net fluid balance:** a typical tea bag contains around 40 to 70mg of caffeine, in 250ml of water. Even at maximum diuretic effect (which doesn't happen in tolerant drinkers anyway), the extra urine produced is far less than the 250ml of fluid in the cup.

The 2011 BJN study, the headline evidence

The 2011 trial split 21 male subjects into two phases: 4 mugs of British black tea per day (with milk and sugar where the participant normally took it), and 4 mugs of equivalent volume of water per day. Hydration

markers (urine and blood) were measured throughout.

The result: no meaningful difference between the tea and the water phases on any hydration marker. Tea drinkers who'd been told for decades to compensate for their tea with extra water were, it turned out, already hydrating fine.

What this means for daily drinking

- **Your daily British tea cups count toward your fluid intake.** 4 to 6 cups of tea is essentially the same hydration contribution as the same volume of water.
- **Herbal and decaf teas are the same as water from a hydration perspective.** No caveats. Drink as much as you like.
- **The exception:** very high dose caffeine intake (8+ strong cups daily, or pure caffeine supplements at exercise physiology doses) can shift the balance slightly. Almost no British drinker reaches this volume.

What can affect tea's hydration value

While tea itself is hydrating, a few things can change the picture in either direction:

- **Adding sugar:** a heavily sugared cup is technically hydrating but worsens insulin response and triggers thirst. Drink your tea less sugared if you can.
- **Adding alcohol:** hot whisky toddies, Irish coffees, and similar dry you out via alcohol's diuretic effect, which is far stronger than caffeine's.
- **Salt:** very salty Tibetan butter tea or Mongolian milk and salt tea does leave you net dehydrated because of the sodium load. These are cultural drinks rather than supermarket tea.
- **Dehydration baseline:** if you're already significantly dehydrated, water is faster to absorb than tea (your gut prefers slightly hypotonic fluids when very dry). For exercise rehydration, water or oral rehydration salts beat tea for the first hour.

How to get the best hydration out of your tea cups

- **Drink less sugary versions:** the sugar load is the main hydration undermining variable in modern tea drinking.
- **Vary the temperature:** hot tea slows down drinking volume; iced tea makes higher volume drinking easier in summer. Both are hydrating.
- **Stack herbal cups in the afternoon:** if you're conscious of caffeine, switch to chamomile, rooibos, or peppermint after lunch. The fluid contribution is the same; the caffeine isn't.
- **Add a glass of water alongside:** not because the tea isn't hydrating, but because a 1:1 tea and water habit makes it harder to under drink across the day.

What we stock for daily hydration cups

Browse the herbal teas collection, the decaf collection, and the tea bags collection for the full daily hydration range.

For high volume daily black tea (the British staple)

- Yorkshire Tea, the British shelf's strongest mainstream daily cup
- Twinings, the heritage brand with the broadest daily cup range
- Tetley, the everyday value black tea
- PG Tips, the brisk Kenya led blend

For unambiguously water equivalent herbal hydration

- Dragonfly Rooibos 40 Bags, naturally caffeine free, very low tannin
- Teapigs Peppermint Leaves 15 Bags, premium peppermint for the all day cup
- Clipper Hibiscus and Rosehip 20 Bags, fruity, refreshing, hot or iced

For decaf options that count fully toward hydration

- Yorkshire Tea Decaf 80 Bags, the brand's decaf that doesn't lose the original character
- Twinings Everyday Decaffeinated 100 Bags, full bodied decaf classic
- Teapigs Decaf Everyday Brew 50 Bags, premium pyramid decaf

Clear caveats

- **Acute dehydration:** if you're acutely dehydrated (post exercise, post illness, hot day), the fastest fluid absorption comes from water or oral rehydration solutions, not tea. Caffeine doesn't undo tea's hydration value, but pure water is faster on an empty stomach.
- **High caffeine cumulative load:** if you're drinking 8+ strong cups of black tea daily, the diuretic effect is no longer negligible. Most British drinkers don't approach this volume.
- **Children and elderly:** have less caffeine tolerance and lower fluid reserves. Their hydration is best monitored with water as the baseline, with tea as part of the mix rather than the whole picture.
- **Kidney disease:** people with advanced kidney disease have specific fluid and electrolyte management requirements that override general "tea is hydrating" advice. Follow the renal dietitian's protocol.
- **Hot flush sufferers:** caffeine triggers some hot flushes via vasodilation; the hydration is fine but the trigger isn't. See the best tea for menopause.

Related reading: the ultimate caffeine guide, the decaf vs caffeine free guide, the tea vs coffee caffeine, the best tea for summer, and the cold brew tea guide.

Does tea dehydrate you, in one place

Point	The short answer

The claim	caffeine is a mild diuretic, so tea "dehydrates"
The reality	at normal intake the water in the cup far outweighs the mild diuretic effect; tea hydrates
The threshold	a diuretic effect needs a fairly large single caffeine dose; ordinary cups do not reach it
Herbal / decaf	effectively no caffeine, so straightforwardly hydrating
Sensible caveat	very high caffeine intake in one go is mildly diuretic; spread over a day it is not a concern

Sources used

- EFSA: Scientific Opinion on Dietary Reference Values for water (2010)
- NHS: Water, drinks and your health

Related teas worth a look: English Breakfast, Earl Grey, green tea, loose leaf tea, Darjeeling, oolong, and herbal tea. Wander the tea shop for more to choose from; UK delivery costs nothing from £35.

FROM THE CURATOR

teas · For daily drinking, the price of one cup is what counts. Loose leaf mostly wins, though supermarket bags can run it close.

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- Lipton French Collection: The European Tea You Can't Find
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