Tea: Camellia Sinensis Fundamentals

From the teas.co.uk wiki

> **Tea, in summary:** Tea is the 5000-year-old Camellia sinensis leaf processed into 6 categories; UK national drink at 100M cups daily; deep cultural heritage.

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

Tea, properly defined, comes from the Camellia sinensis plant. All true tea (black, green, white, oolong, yellow, pu erh) is the same species processed differently. Herbal "teas" are technically tisanes, infusions of other plants. The world drinks 6 billion cups daily, making tea the most consumed beverage after water. Britain is one of the largest per capita tea drinking countries on earth.

What tea actually is

True tea is leaves from Camellia sinensis, an evergreen shrub native to East Asia. Two main varieties:

- **C. sinensis var. sinensis:** small leafed, native to China, hardier in cooler climates. Used for most green tea, white tea, and Chinese black tea.
- **C. sinensis var. assamica:** large leafed, native to Assam (India). Used for most Indian, Sri Lankan, and African black tea.

The same plant produces every category of true tea. The difference is processing.

The six tea categories

White tea

Minimal processing. Leaves picked young, withered, dried. Pale colour, delicate flavour. Examples: Bai Mu Dan, Silver Needle. More on white tea.

Green tea

Picked, then heated quickly to stop oxidation (steam in Japan, pan in China). Vegetal, fresh flavour. Examples: sencha, matcha, Longjing, gunpowder. More on Japanese green tea.

Yellow tea

Rare. Similar to green but with extra "smothering" step that slightly oxidises. Mellow, smooth. Specialty.

Oolong tea

Partial oxidation (10-80%). The widest flavour range, floral, fruity, roasted, complex. Examples: Tieguanyin, Da Hong Pao, Dong Ding. More on oolong.

Black tea

Full oxidation. Strong, malty or bright. The British classic. Examples: Yorkshire Tea, Earl Grey, Assam, Darjeeling. More on black tea.

Pu erh tea

Post fermented. Aged tea with distinctive earthy character. Sheng (raw) and shou (cooked) versions. Yunnan specialty. More on pu erh.

What's NOT tea (technically)

Plant infusions that don't come from Camellia sinensis are technically **tisanes** or **herbal infusions** not tea. But the everyday usage calls them "tea" anyway:

- **Chamomile tea.** Daisy flower infusion.
- **Peppermint tea.** Mint leaf infusion.
- **Rooibos.** South African red bush.
- **Hibiscus.** Hibiscus flower.
- **Ginger tea.** Ginger root.
- **Yerba mate.** South American holly.
- **Most "fruit teas".** Dried fruit infusions.

Don't worry about the technicality, calling them tea is fine in everyday conversation.

The history

Tea was discovered in China around 2737 BCE (legendary, possibly real timing). Spread throughout Asia over millennia. Reached Europe in the 17th century. Reached Britain via Catherine of Braganza in 1662. Became British cultural staple over the next 300 years. More on tea history.

The numbers

Global production

- ~6 million tonnes of tea produced annually.
- China: largest producer (~40% of global).
- India: second (~20%).
- Sri Lanka, Kenya, Turkey, Vietnam: significant producers.

Global consumption

- ~6 billion cups consumed daily.
- China: largest consumer (volume).
- Turkey: highest per capita.
- UK: 100 million cups daily.
- UK per capita: ~2-3 cups daily.

Caffeine in tea

- **Black tea:** 40-50mg per cup.
- **Green tea:** 25-40mg per cup.
- **White tea:** 15-30mg per cup.
- **Oolong:** 30-50mg per cup.
- **Matcha:** 50-70mg per cup.
- **Pu erh:** 30-45mg per cup.
- **Decaf:** 2-5mg per cup.
- **Herbal:** 0mg (most).

L theanine, tea's unique compound

L theanine is an amino acid almost unique to tea (and a few mushroom species). It modulates the caffeine response, producing a cool, collected focus. The reason tea drinkers report different subjective experience to coffee drinkers at equivalent caffeine doses.

How tea is brewed

1. Tea leaves placed in vessel.
2. Hot water poured over.
3. Leaves steep, compounds extract into water.
4. Leaves removed (or strained out).
5. Optionally milk, sugar, lemon, honey added.
6. Drunk while hot.

Optimal water temperature varies by type (green tea 70-80°C; black tea 95-100°C). Optimal steep time varies (green 1-2 min; black 3-5 min; herbal 5-7 min). More on temperature.

Tea by region

- **China:** Every category. The origin and global diversity champion.
- **India:** Black tea, Assam (strong), Darjeeling (delicate), Nilgiri (smooth).
- **Sri Lanka:** Ceylon black tea spectrum.

- **Japan:** Steamed green tea, sencha, matcha, gyokuro, hojicha.
- **Taiwan:** Premium oolong specialist.
- **Kenya:** Strong black tea, basis for British tea bags.
- **Vietnam, Indonesia, Argentina:** Mid tier producers.
- **UK (Cornwall):** Tregothnan small batch British tea.

Tea grades

- **Whole leaf:** Highest quality. OP (orange pekoe), FOP (flowery), TGFOP (tippy golden).
- **Broken leaf:** Mid tier. BOP (broken orange pekoe).
- **Fannings:** Smaller particles. Common in tea bags.
- **Dust:** Smallest. Cheapest tea bag tier.
- **CTC (crush tear curl):** Modern Indian processing for fast extracting bag tea.

UK tea consumption

- ~100 million cups daily.
- Tea bags ~95% of mass market.
- Black tea ~75% of consumption.
- Per capita: 2-3 cups daily.
- Yorkshire Tea, Tetley, PG Tips dominate everyday market.
- Specialty/premium market expanding.

FAQ

What is tea? Leaves from the Camellia sinensis plant, processed into white, green, yellow, oolong, black, or pu erh.

Is herbal tea actually tea? Technically no, it's a tisane. But everyday usage calls it tea.

Most popular tea? Globally, green tea (volume) and black tea (Western markets).

Caffeine? Most teas have 25-50mg per cup. Herbal infusions are caffeine free.

Where does tea come from? Originally China; now grown in 60+ countries.

Curator's note: tea is one of the world's great daily drinks, same plant species across all six true tea categories, plus the wider tisane family. The British relationship with tea is genuine and 350 years old. Worth respecting the breadth. Lee, teas.co.uk, Tunbridge Wells.

tea fundamentals at a glance

Aspect	The note
Definition	Camellia sinensis leaf processed into 6 categories
The 6 categories	Black, green, white, oolong, pu-erh, yellow

Aspect	The note
Not technically tea	Herbal infusions (rooibos, chamomile, peppermint); tisanes
Origin	China, 5000 years ago; global cultivation now
Production scale	Around 6 million tonnes per year globally
UK consumption	100 million cups daily; the UK national drink
Caffeine range	20-80mg per cup; zero in herbal
L-theanine	A tea-unique amino acid; relaxed but alert effect

Reference noted

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

Teas in the related corner of the range: English Breakfast, Earl Grey, green tea, loose leaf tea, Darjeeling, oolong, and herbal tea. Pop into the tea shop for the rest; free UK shipping starts at £35.

FROM THE CURATOR

teas · Per-cup price is the only price that matters. Loose leaf usually wins; supermarket bags sometimes do too.

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

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