What Is Butterfly Pea Flower Tea? The Blue Tea That Turns Purple

From the teas.co.uk wiki

> **Butterfly pea flower tea, in short:** What is butterfly pea flower tea? The blue herbal infusion that turns purple with lemon. Real chemistry, modest flavour, oversold health claims.

Butterfly pea flower tea is the bright blue drink that turns purple when you add lemon, and the short answer is that it is a caffeine free flower infusion whose colour change is real chemistry, not a gimmick, while the "brainpower, anti ageing superfood" marketing layered on top is considerably overstated.

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What it actually is

It is a tisane, not tea: an infusion of the dried blue flowers of Clitoria ternatea, a plant grown across South East Asia, with no tea leaf and therefore no caffeine. The dramatic blue comes from anthocyanin pigments, and the colour really is pH sensitive: add an acid such as lemon and it shifts toward purple and pink. That is real chemistry, not an additive or a trick, and it is the most interesting thing about the drink.

What it tastes like

On its own it tastes mild, slightly earthy and faintly woody, which is partly why it is used as much for colour as for flavour and is often blended with lemongrass, ginger or fruit. The point of butterfly pea is largely visual and gentle rather than a bold flavour.

The health picture

The sensible view: the colour change is real, and so is the caffeine free, low calorie, pleasant to drink part, but the memory, anti ageing, fat burning and body cleaning claims are not supported at the level the marketing implies; they usually rest on concentrated extracts or lab studies that do not translate to a cup of flower infusion. Plenty of brightly coloured plants carry anthocyanins; none of them becomes a treatment because of it. It is, in plain terms, a nice, harmless, photogenic drink with no demonstrated special powers in cup form, and for general use it is one of the gentler tisanes, with the usual sensible caution around

concentrated extracts and pregnancy.

How to use it well

Use it for what it really is: brew the dried flowers in water just off the boil for around five minutes (it is forgiving and hard to make bitter), then play with the fun part: brew it strong as a natural blue base for iced drinks and mocktails, and add citrus at the table so the colour shifts in front of people. As a hot drink it is best with a flavour partner. Enjoy the colour and the caffeine free gentleness, both real, and ignore the superfood story, which is not.

The colour chemistry

The blue colour comes from anthocyanins, a family of natural plant pigments also found in blueberries, red cabbage, red wine grapes and purple sweet potatoes. Anthocyanins are pH-sensitive: they appear different colours depending on the acidity of the solution they're in. In neutral water, they're typically blue. In acid (low pH), they shift toward red or purple. In alkaline (high pH), they shift toward green or yellow.

This is why butterfly pea tea turns purple or pink when you add lemon or lime juice. The juice lowers the pH, the anthocyanins respond by shifting their colour, and the change is visible within seconds. The trick is chemistry, not magic, yet it is visually striking and works every time. The same chemistry works in reverse: adding baking soda or another alkaline ingredient shifts the colour the other way, toward green.

In short: butterfly pea flower tea

Question	Short answer
What is butterfly pea flower tea?	An herbal infusion made from dried flowers of Clitoria ternatea, a tropical climbing plant native to Southeast Asia.
Why is it blue?	The flowers contain anthocyanins (the same pigment family that gives blueberries and red cabbage their colour), which appear deep blue in water.
What does it taste like?	Mild, slightly earthy, similar to weak green tea or grass-water. Most people drink it for the colour, not the flavour.
The colour-change trick?	Add lemon or lime juice, the blue turns purple or pink within seconds, because anthocyanins change colour with pH.
Where is it traditional?	Thai cuisine (nam dok anchan), Malaysian rice dishes (nasi kerabu), Burmese salads. Used as natural food colouring for centuries.
Caffeine?	None. It's not from Camellia sinensis; it's a herbal infusion with zero caffeine.
Health claims?	Only modest evidence, mostly from the lab. Strong claims about memory, vision and shedding pounds are poorly supported.
Is it safe?	Generally safe at culinary levels. Avoid in pregnancy due to limited research on safety; also avoid high doses without medical advice.

Reference noted

- Encyclopaedia Britannica: Tea

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